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RESEARCH

ADHERENCE TO TUBERCULOSIS TREATMENT: BIOPOLITICAL HEALTH PROMOTION STRATEGIES IN THE NEOLIBERAL PERSPECTIVE*

ADESÃO AO TRATAMENTO DA TUBERCULOSE: ESTRATÉGIAS BIOPOLÍTICAS DE PROMOÇÃO DA SAÚDE NA VERTENTE NEOLIBERAL*

CUMPLIMIENTO DEL TRATAMIENTO DE LA TUBERCULOSIS: TÁCTICAS BIOPOLÍTICAS PARA FOMENTAR LA SALUD EN EL CONTEXTO NEOLIBERAL

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ABSTRACT

Objective: to analyze how the recommendations on therapeutic adherence present in tuberculosis control manuals constitute biopolitical Health Promotion strategies in the neoliberal perspective. Method: Documentary and qualitative research that analyzed five manuals published between 2002 and 2019, based on the post-critical methodology inspired by Foucault. Results: four biopolitical strategies were identified, which correspond to the analytical categories of this study: i) Exaltation of statistical knowledge as a strengthening of managerial logic; ii) Prioritizing the treatment of bacilliferous cases and establishing measures to control the risk of contamination as a way of maintaining the safety of the healthy population; iii) Discursive emphasis on the vulnerable population as a way of omitting precarious bodies; and iv) Discourse about self-employment to overcome poverty, as compensation for the lack of social protection policies. **Conclusions:** some recommendations for tuberculosis control consist of biopolitical Health Promotion strategies in a neoliberal perspective, promoting health discourses that emphasize individual aspects, such as self-care, self-responsibility, autonomy, and empowerment of the subject. Even in cases where we perceive an association between illness and social determinants of health and situations of vulnerability, tuberculosis control actions insist on actions based on a health managerial perspective. In practice, there appears to be a lack of social protection policies and actions capable of combatting inequities, which is essential for effective therapeutic adherence and cure.

Keywords: Tuberculosis; Treatment Adherence and Compliance; Health Promotion; Vulnerable Populations; Communicable Disease Control.

Objetivo: analisar como as recomendações sobre adesão terapêutica presentes em manuais de controle da tuberculose constituem estratégias biopolíticas de Promoção da Saúde na vertente neoliberal. **Método:** Pesquisa documental e qualitativa que analisou cinco manúais publicados entre 2002 e 2019, a partir da metodologia pós-crítica de inspiração foucaultiana. Resultados: foram identificadas quatro estratégias biopolíticas, que correspondem às categorias analítica deste estudo: i) Exaltação do saber da estatística como fortalecimento da lógica gerencialista; ii) Priorização do tratamento dos casos bacilíferos e instituição de medidas de controle do risco da contaminação como forma de manter a segurança da população saudável; iii) Ênfase discursiva na população vulnerável como forma de omitir corpos precarizados; e iv) Discurso do empreendimento de si para superação da pobreza, como compensação da falta de políticas de proteção social. Conclusões: algumas recomendações de controle da tuberculose consistem em estratégias biopolíticas de Promoção da Saúde na vertente neoliberal, promovendo discursos sanitários que enfatizam os aspectos individuais, como o autocuidado, a autorresponsabilização, a autonomia e o empoderamento do sujeito. Mesmo nos casos em que percebemos associação do adoecimento com determinantes sociais da saúde e com situações de vulnerabilidade, as ações de controle da tuberculose insistem em ações inscritas numa perspectiva gerencialista da saúde. Na prática, parece haver um vazio de políticas de proteção social e de ações capazes de combater as iniquidades, o que é imprescindível para a efetiva adesão terapêutica e para a cura. Palavras-chave: Tuberculose; Cooperação e Adesão ao Tratamento; Promoção da Saúde; Populações Vulneráveis; Controle de Doenças Transmissíveis.

RESUMEN

Objetivo: el propósito es examinar de qué manera las directrices sobre el cumplimiento terapéutico en los Manuales de Control de la Tuberculosis representan estrategias biopolíticas de Promoción de la Salud en el contexto neoliberal. **Método:** se llevó a cabo una investigación documental cualitativa que analizó cinco Manuales publicados entre 2002 y 2019, utilizando un enfoque postcrítico inspirado en las ideas de Foucault. Resultados: se identificaron cuatro tácticas biopolíticas (categorías de análisis): 1) Enfatizar el valor del conocimiento estadístico como refuerzo de la lógica administrativa; 2) Priorizar el tratamiento de los casos con bacilos y establecer medidas de control del riesgo de contagio para salvaguardar a la población sana; 3) Poner un énfasis discursivo en la población vulnerable para dejar de lado a los cuerpos en situación precaria; y 4) Promover el autoempleo como solución para superar la póbreza, en sustitución de políticas de protección social insuficientes. **Conclusiones:** algunas recomendaciones dirigidas al control de la tuberculosis adoptan tácticas biopolíticas de fomento de la salud en el marco neoliberal, empleando discursos relacionados con la salud que ponen un énfasis en aspectos individuales como el autocuidado, la asunción de responsabilidad personal, la autonomía y el empoderamiento del individuo. Aun en situaciones en las que se percibe una correlación entre la enfermedad y los factores sociales que afectan la salud, así como con contextos de

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vulnerabilidad, las medidas de control de la tuberculosis siguen promoviendo enfoques alineados con una perspectiva de gestión de la salud. En la práctica, parece haber una carencia de políticas y acciones de protección social que tengan la capacidad de abordar las disparidades, las cuales son cruciales para un cumplimiento terapéutico y una curración eficaces.

Palabras clave: Tuberculosis; Cumplimiento y Adherencia al Tratamiento; Promoción de la Salud; Poblaciones Vulnerables; Control de Enfermedades Transmisibles.

INTRODUCTION

In several countries, Nursing has led the development of actions to promote adherence to tuberculosis (TB) treatment⁽¹⁾, a disease considered a public health problem in the world, with a high incidence and high mortality due to infectious causes. Brazil is among the 30 countries with a high burden of TB and TB-HIV and has incidence rates equal to or greater than 30 cases per 100,000 inhabitants in 14 federated units)(2). This terrible national epidemiological scenario is aggravated by the sharp growth of income inequality among the poorest 50%(3), making adherence to treatment even more difficult for populations in vulnerable situations⁽⁴⁾. These aspects constitute challenges for healthcare professionals, as TB control actions go beyond individual clinical care provided in healthcare services, requiring collective and intersectoral interventions in unfavorable socioeconomic and cultural contexts(1).

Among these interventions, the member states of the World Health Organization (WHO) already recognize the need to address the Social Determinants of Health (SDH) - that is, social, economic, cultural, ethnic-racial, psychological and behavioral aspects related to occurrence of diseases in the population⁽⁵⁾ - as a necessary condition for TB control⁽²⁾ Despite the recognition that, alone, the healthcare sector is not capable of controlling a disease strongly associated with contexts of poverty, interventions to promote adherence to treatment are still triggered by educational actions that aim to exalt individual aspects of the Promotion of Health. ⁽⁶⁾ Aspects such as self-responsibility, autonomy and empowerment of subjects can be considered part of the neoliberal aspect of Health Promotion, which is guided by changing behaviors and adopting healthy habits⁽⁷⁾.

In the health field, this neoliberal aspect puts into operation professional conduct that moves towards maintaining, ensuring and enhancing behaviors for the formation of a free, autonomous, responsible, hard-working subject capable of calculating risks, making decisions, maximizing and collaborating with your health, regardless of sociocultural and economic context^(8,9). This understanding is related to the critical approach in the field of public health, which considers that Health Promotion, as a policy (despite foreseeing since its emergence an expanded conception of health that requires social resources and personal capabilities)^(5,6), produces moralizing health discourses that seek to shape, educate

and lead people to behave in accordance with the ways of life proposed by neoliberal rationality, even if people do not have basic living conditions or the capacity to do so^(10,11).

Based on the above, this research is based on the premise that certain recommendations present in TB control manuals to strengthen adherence to treatment for the disease can be identified as biopolitical Health Promotion strategies in a neoliberal perspective. By biopolitics, we understand strategies (actions, conduct and guidelines) that, due to the fact that they affect aspects of the collective life of the population as a form of surveillance and control of diseases seen as a public health problem, end up considering life as an object and political target (10,12). In this study, we call the neoliberal aspect of Health Promotion the actions and discourses that, in a prescriptive way, aim to hold individuals and populations responsible for the behavior, without the support of social protection policies and in a way that is detached from the sociocultural context⁽¹¹⁾ of the person with TB. In this regard, it is noteworthy that Michel Foucault's analyzes gave visibility to the fact that, from the 18th century onwards, biopolitics, as a power over the lives of populations, was associated with the need to keep bodies healthy for the expansion of capitalism in its different stages of development(10). Today, what regulates subjects are the threat of illness, the naturalization of the logic of competition and competitiveness, leading them to the moral duty of staying healthy(11). Therefore, in neoliberal rationality, promoting health involves legitimizing norms and prescriptions of biomedical knowledge that enhances "changing attitudes, changing individual behaviors and altering the course in which people make their choices in order to align these behaviors, these attitudes and choices, with the ways in which health should be directed"(8).

In this sense, the present study sought to analyze how the recommendations on therapeutic adherence to TB treatment present in disease control manuals in Brazil constitute biopolitical strategies that are part of the neoliberal aspect of Health Promotion. It is understood that the findings of this research can contribute to the adoption of more critical attitudes in relation to the strategies used nationally and internationally to strengthen adherence to TB treatment, in such a way that it is possible to understand some of the possible conditions that shape the scenarios epidemiological and social, whose weaknesses seem to exceed the healthcare sector's ability to respond.

METHODOLOGY

This is an exploratory, documentary research with a qualitative approach, inspired by post-critical

methodologies in education and health⁽¹³⁾, more specifically, in the Foucauldian theoretical-methodological framework^(7,14). The corpus of analysis consists of 5 manuals of recommendations for tuberculosis control in Brazil^(2,15,18). The selection of manuals had the following inclusion criteria: i) constitute a document aimed at healthcare professionals working in control of TB; ii) be easily accessible via the internet; iii) and be published between 1993, the year in which TB began to be seen as a public health problem by the WHO⁽¹⁷⁾, and 2019, the year in which this research began to be carried out.

Traditionally, manuals can be defined as documents that bring together recommendations with a view to guiding healthcare professionals on certain ways of intervening in the control of a disease, becoming important tools for training human resources in the healthcare field(2) . The choice of this corpus is justified by the fact that, according to the post-critical methodology inspired by Foucault^(7,13), the recommendations of these manuals can be problematized and analyzed as discursive practices; that is, as legitimate knowledge that produces practices and discourses considered true and that multiply through the exercise of healthcare practices⁽⁷⁾. As a result, these manuals produce effects that can be observed in how healthcare professionals are instructed to guide subjects' behavior in relation to coping with a disease. Therefore, the recommendations for Health Promotion present in these manuals are a powerful biopolitical device, as they are formative of healthcare practices and can constitute the subjects^(7,14).

The operationalization of this research took place in three steps, which were carried out from March 2019 to September 2020. The first step was the design of the research object based on the problematization in the framework used. This step required reading the manuals repeatedly, in order to question the recommendations based on knowledge produced, on order to visualize some historical relationships⁽¹⁹⁾ with the assumptions of the neoliberal aspect of Health Promotion^(11,14). This methodological strategy sought to problematize knowledge in the healthcare field and how it can implement certain actions for adherence to TB treatment, consistent with the current challenges faced in controlling the disease.

In the second step, developing a way to examine the research corpus to obtain information, a main question was formulated for the focus of the analysis that could answer the research objective: What conditions enabled the emergence of recommendations as biopolitical strategies for Health Promotion in the neoliberal perspective? To support this central question, side questions were

created: Under what circumstances can a TB control strategy be instituted?; For whom and with what effect do these recommendations appear as biopolitical strategies to improve life?; What is produced from these discursive practices? Such questions are pertinent because, in the framework used, what is highlighted is not the internal order of a field of knowledge, but its relations with exteriority⁽¹³⁾. At this step, the analysis categories⁽¹³⁾ were also constructed based on the selection of excerpts from the manuals that allowed understanding the discourses that circulate certain ways of thinking about adherence to TB treatment.

Finally, the third step concerns the organization of analysis strategies and the description of information, consisting of the categorization of recommendations as biopolitical strategies^(7,19) (main axis of analysis). Next, excerpts from the manuals that could indicate which biopolitical strategies are put into operation based on the recommendations used were selected.

The analysis to identify biopolitical strategies was based on the definition of four categories, which were formulated based on interpretations and inferences together with authors who work with a critical approach in the field of public health(11), with the purpose of analyze the neoliberal aspect of Health Promotion as a biopolitical device(14). In the first analytical category, entitled "Exaltation of statistical knowledge as a strengthening of managerial logic", excerpts related to the discourses were selected that, today, validate certain ways of coping with diseases based on the current healthcare model⁽¹¹⁾. In the second category, entitled "Prioritizing the treatment of bacilliferous cases and institution of measures to control the risk of contamination as a way of maintaining the safety of the healthy population", excerpts related to discourses that relativize the understanding of risk were selected(20). In the third category, "The discursive emphasis on the vulnerable population as a way of omitting precarious bodies", the excerpts that relate to discourses of vulnerability were analyzed, from the perspective of precarious bodies(21,23). Finally, in the fourth and final analytical category, called "The discourse of the self-entrepreneurial subject to overcome poverty as compensation for the lack of social protection policies", excerpts relating to the predominant discourse in neoliberal logic were analyzed, which presupposes that tackling socially based diseases can be done through entrepreneurship⁽⁹⁾; that is, based on the idea that, to overcome poverty and compensate for the lack of social protection policies, it is enough to change individual behavior⁽⁶⁾.

RESULTS

Figure 1 presents an expository summary of the manuals analyzed.

In Figure 2, based on the analysis of the recommendations in the manuals, some of the selected excerpts are presented that are configured as biopolitical Health Promotion strategies in the neoliberal perspective, according to the four analytical categories. As it was impossible to include all excerpts from each analytical category in this article, we decided to select two or three excerpts from different manuals that would allow us to demonstrate what we intended. It is noteworthy that, although all the excerpts were analyzed and, from them, the analytical categories were created, we were not interested in verifying whether all the discourses are present in all the selected manuals. This is because, in the theoretical--methodological framework used, recommendations are analyzed as discursive practices emerging from certain conditions of possibility. Therefore, we did not intend to analyze the different documents from a chronological perspective that presupposes the analysis of a possible transformation of practices over time. Our intention was to analyze - and thus make visible - how recommendations on therapeutic adherence published in specific documents constitute discourses that operate certain biopolitical strategies to the detriment of others.

DISCUSSION

In relation to the first analytical category (or biopolitical strategy), "Exaltation of statistical knowledge as a strengthening of managerial logic", it is observed, in the manuals analyzed, that certain recommendations are triggered by a discourse that aims to measure, dimension and delineate the scenario epidemiological analysis of TB based on the emphasis on the use of quantitative data, that is, numbers, percentages, indicators, operational calculations and goals. This is because, in Brazil, TB is a notifiable disease, whose information systems are fed by information about the disease that, when collected individually, allows us to know the epidemiological scenario of the disease in the different regions of the country. Such information supports the development of collective healthcare interventions aimed at the general population. In a way, this emphasis given to statistical knowledge indicates how much, even today, contemporary medicine uses practices that were crucial to the formation of social medicine in the 18th century(14). From this perspective, the need to control diseases with socio-environmental causes required biopolitical interventions(19) aimed at the management and regulation of vital processes that aim to manage and control behaviors understood to pose a risk to the health of the population.

The legitimacy given to quantitative data in delineating the TB epidemiological scenario meets a need desired

Figure 1 – Summary of the identification elements of the analyzed manuals.

Title	Department responsible for preparing the document	Intended audience
Technical manual for tuberculosis control: basic care notebooks	Department of Primary Care. Secretariat of Health Policies. Ministry of Health	Primary Care health professionals ⁽¹⁵⁾
Health surveillance: dengue, schistosomiasis, leprosy, malaria, trachoma, and tuberculosis	Department of Primary Care. Secretariat of Health Care. Ministry of Health	Primary Care health professionals ⁽¹⁶⁾
Manual of recommendations for tuberculosis control in Brazil	Department of Epidemiological Surveillance. Health Surveillance Secretariat. Ministry of Health	Healthcare professionals at the three levels of health care ⁽¹⁷⁾ .
Directly observed treatment (DOT) of tuberculosis in primary care: nursing protocol	Department of Epidemiological Surveillance. Health Surveillance Secretariat. Ministry of Health	Professional nurses in Primary Care ⁽¹⁸⁾
Manual of recommendations for tuberculosis control in Brazil	Department of Communicable Disease Surveillance. Health Surveillance Secretariat. Ministry of Health	Healthcare professionals at the three levels of health care ⁽²⁾

Source: The authors, 2022.

Figure 2 - Biopolitical strategies for Health Promotion in the neoliberal perspective.

Figure 2 - Biopolitical strategies for Health Promotion in the neoliberal perspective.		
Category 1	Excerpts selected in analytical category 1	
Exaltation of statistical knowledge as a strengthening of managerial logic: the focus given to the use of epidemiological indicators, operational calculations, and goals to be achieved seeks to record TB as a measurable healthcare problem capable of being controlled through the agreement of goals to be met by healthcare professionals	[] Brazil is one of the 22 countries prioritized by the WHO that account for 80% of the global TB burden [] and an incidence rate of 38/100,000 inhabitants. [] These indicators place Brazil in 19th position in relation to the number of cases and in 104th position in relation to the incidence coefficient []. Impact goals were considered to reduce, by the year 2015, incidence and mortality by half, in relation to 1990 ⁽¹⁷⁾ . [] For operational purposes, the recommended national parameter is 1% of the population, or 5% of first-time consultations by individuals aged 15 or over in healthcare services ⁽¹⁷⁾ . Information Systems aim to collect, transmit and disseminate data routinely generated by the Epidemiological Surveillance System of the three spheres of government, through a computerized network [] ⁽¹⁵⁾ .	
Categoria 2	Excertos selecionados na categoria analítica 2	
Prioritizing the treatment of bacilliferous cases and the institution of measures to control the risk of contamination as a way of maintaining the safety of the healthy population: prioritizing care for cases that transmit the disease, and the implementation of segregated biosafety measures emerge as a way of guaranteeing safety of the healthy population from the risk of contamination by the disease.	The treatment of bacilliferous bacteria is the priority activity for tuberculosis control, as it allows the major sources of infection to be quickly eliminated ⁽¹⁵⁾ . For new cases of pulmonary forms with negative sputum tests, or cases of extrapulmonary TB, with diagnostic confirmation [], the regimen may or may not be supervised ⁽¹⁵⁾ . [] control measure can reduce the exposure of professionals and other people who circulate in the healthcare unit. This routine must: include a waiting room to treat suspects, contacts and patients with TB, preferably open and well ventilated; avoid the accumulation of patients in the waiting room, staggering appointments throughout the shift []; avoid caring for patients suspected of having TB in adjacent rooms with other patients with immunosuppression ⁽¹⁸⁾ .	
Category 3	Excerpts selected in analytical category 3	
Discursive emphasis on the vulnerable population as a way of omitting precarious bodies: the vulnerable population group is formed from the gathering of populations at greater risk of becoming ill with TB and emerges as an attempt to homogenize differences arising from discriminatory actions or value judgments.	Brazil does not have a generalized epidemic, but it is concentrated in some populations, such as people living with HIV (PLHIV), homeless, deprived of liberty (PPL), the indigenous population and people living in clusters and in situations of poverty [] ⁽²⁾ . Factors related to individuals and their living conditions before incarceration: Young population, predominantly male, with low education, from disadvantaged communities with a higher incidence of TB. Use of illicit drugs, higher prevalence of HIV infection. []. Factors related to incarceration: Overcrowded cells, poorly ventilated and with little sunlight. [] Difficulty accessing healthcare services in prison ⁽¹⁷⁾ .	
Category 4	Excerpts selected in analytical category 4	
[] adherence is defined as "a collaborative process that facili acceptance and integration of a certain therapeutic regimen into lives of people undergoing treatment, presupposing their participation of acceptance and integration of a certain therapeutic regimen into lives of people undergoing treatment, presupposing their participate decisions about it". Therefore, adherence must be understood as a consecution policies: the need for health professionals, together with other sectors, to act in confronting SDH is associated with the discourse of overcoming poverty to build idea of adherence as a collaborative behavior. They emerge as elements capable of filling the void left by the lack of social protection policies. [] adherence is defined as "a collaborative process that facili acceptance and integration of a certain therapeutic regimen into lives of people undergoing treatment, presupposing their participate decisions about it". Therefore, adherence must be understood as a transversal articulation suffers to be achieved, since the other necessary conditions have already been highlighting the updating of technical knowledge and the availability of resources [], through which it is perfectly possible [] to control tubers to create mechanisms that reduce situations of vulnerability, defend en incorporate participation and social control in the management of public to create mechanisms that reduce situations of vulnerability, defend en incorporate participation is therefore dedicated to systematizing the procession of the entire treatment and avoiding complications to abandonment [], ensuring patient adherence and successful treatment.		

Source: The authors, 2022.

by the contemporary way of thinking, which focuses on designing an objective and standardized truth through reliable statistical elements, which can transform the unknown into universal knowledge. This aspect is in accordance with the managerial logic of health that currently controls the actions of professionals, reinforcing

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epidemiology as a powerful scientific discourse⁽¹⁴⁾. According to this logic, isolated actions by the healthcare sector to meet goals and protocols⁽¹¹⁾ would supposedly be capable of controlling a socially based disease such as TB. However, this perspective opposes what we can consider as advances recognized by the current manual:To control

TB, it is necessary to put into practice assumptions such as intersectorality and tackling SDH⁽²⁾. However, the discourses insist on the need to change behavior and adopt healthy lifestyle habits through prescriptive norms, which take little into account the social context of the person affected by the disease⁽⁶⁾. There are still several challenges for the different sectors - such as social assistance and non-governmental entities - are actually able to develop actions in an integrated manner.

In relation to the second biopolitical strategy (or analytical category), "Prioritizing the treatment of bacilliferous cases and the institution of measures to control the risk of contamination as a way of maintaining the safety of the healthy population", it is highlighted that the recommendations seek to prioritize the diagnosis and treatment of cases of bacilliferous pulmonary TB, with a view to achieving a cure outcome. his recommendation, although justified by the epidemiology of the risk as necessary to interrupt the chain of transmission of the disease, ends up allowing flexibility, that is, the non-use of Directly Observed Treatment (DOT), which today is the main tool for TB control(2), in cases that do not transmit the disease. Furthermore, there are recommendations that institute measures to reduce the risk of contamination through a space-time (re)organization, so that the person undergoing treatment has restrictions on the length of stay in the healthcare service. Such recommendations indicate the determination of the best time for the person to be seen (e.g., end of the day, when the service is empty) and the delineation of the space in which they can circulate (e.g., external waiting room and care in a single room).

From this perspective, it is understood that both segregated measures and the prioritization of care for bacilliferous cases are justified by the need to guarantee the safety of the healthy population. At this point, Foucault's analyzes(19) are productive in understanding that certain techniques of control over the body are put into operation as a security device that aims to improve life, as promised by biopolitical strategies. These segregated measures do not act as a mechanism of law and punishment, but as delimitations that seek to reduce cases of the disease into a "series of probable events", within the limits of what is acceptable⁽¹⁹⁾. In today's society, segregating based on standards and rules established by healthcare services replaces an action of exclusion, that is, physical separation of sick bodies such as hospitalization (19). It is in the name of the safety of the healthy population that space-time techniques reorganization of the sick body are made possible and legitimized by professionals. By managing their risks and making the best choice (staying alive), the sick person accepts and agrees to freely submit to this format of institutionalized care. An alternative to these segregated measures would be to intensify the search for TB cases in the population by Primary Care professionals. This measure is seen as an important programmatic strategy, as early diagnosis and treatment contribute to preventing cases from remaining as transmitters of the disease, which would eliminate the need to separate users with TB from other patients when receiving care at healthcare services.

Still in relation to these aspects, it is important to consider that the safety of the population would be achieved if the acceptable number of people with TB were reached (target of 10 cases per 100,000 inhabitants)(2). This sets precedents for us to question the fact that, even if TB is controlled, there would be a percentage of people who can become/are/remain ill. This percentage makes visible the fact that certain recommendations, despite emerging from guidelines that seek to prevent illness and promote health equally, constitute a device that makes certain lives live to the detriment of others - which is only possible based on approaches to the risk management paradigm of neoliberal thought(14,20). These approaches do not take into account that the risk of an individual contracting a disease cannot be isolated from countless other factors that go beyond the biomedical, such as different sociocultural contexts or unfavorable socioeconomic contexts(20). These aspects represent a major challenge for healthcare professionals, as most of the factors associated with treatment abandonment transcend the technical capacity of the healthcare sector, such as increased poverty, which, in turn, generates food insecurity, difficulty access to healthcare services, lack of support network to cope with the disease, among other difficulties(1,4).

In relation to the third analytical category, "Discursive emphasis on the vulnerable population as a way of omitting precarious bodies", it is highlighted that the group that the current manual calls "vulnerable population" (2) refers to populations identified as those at greater risk of illness due to TB, already presented in previous manuals (15-18), such as: population deprived of liberty; homeless population; people living with HIV/AIDS; people living in contexts of poverty; and indigenous population. The recommendation is that, by prioritizing care for the "vulnerable population", in which TB cases are concentrated, it would be possible to achieve the new goal of eliminating the disease by 2035. Beforehand, it is highlighted how problematic the attempt to group people with unique characteristics based on the idea of

vulnerability, because there is a wide discussion about the use of this term, which carries different meanings according to different fields of knowledge⁽²²⁾.

Despite the progress brought by the current manual in highlighting and discussing the issue of the social determination of TB — when compared with previous documents —, it is necessary to consider that the term "vulnerable", as used in the expression "vulnerable population" for TB(2), is based on risk epidemiology, raising the idea that this population is exposed to more risks of illness than others. Likewise, it is understood that, although it is not the objective of technical documents to deepen discussions of a theoretical nature, this research seeks precisely to tension issues relating to the conceptual framework of vulnerability and risk(11,20,22) in the field of health. In Nursing, the concept of "vulnerability" is often associated with "susceptibility to damage", as a synonym for "risk"(22), which seems to be inappropriate in the case of TB, as it is a disease with multiple causes that go beyond the categories related to illness, elaborated by biomedical rationality.

Another point of questioning is how much the action of separating groups of people with different characteristics from the general population can reinforce discriminatory discourses, which can lead certain population groups to suffer deprivation of access to healthcare due to the countless inequalities generated by an exclusionary economic system⁽²³⁾. Therefore, it seems to us to be a mistake to produce a discourse that seek to enhance the idea that healthcare interventions organized to deal with a "group that brings together various types of populations" would be sufficient to reduce vulnerabilities and segregations arising from race and social standard, as it does not take into account the importance of guaranteeing citizenship for socially vulnerable populations for the control of TB.

In the case of discrimination based on race, for example, the higher incidence of the disease and the higher mortality rate that occurs among black people^(2,4) would be related to inequality in the distribution of income by race in Brazil, a situation aggravated by impoverishment in a general way⁽³⁾. Furthermore, it is necessary to consider that the greater occurrence of TB in the black population is not because they have less capacity to manage risks but because this population has worse socioeconomic conditions and suffers restrictions in access to healthcare services⁽¹⁹⁾, aspects that hinder the adherence to treatment. Regarding the indigenous population, considering them more vulnerable to TB, for example, reinforces the idea that this population is "naturally" more susceptible to the risk⁽²⁰⁾ of the disease, postulating an idea

of inferiority or a supposed cultural denial condition of the disease, "justified" by inappropriate behaviors, such as refusing to take medications prescribed by conventional medicine. However, the precarious living conditions generated by changes in cultural habits, the unavailability of land for work and the incorporation of new eating habits resulting from the lifestyles of capitalist society generate a greater risk of illness and a higher mortality rate for the indigenous population — compared to the general population (11,21).

Such aspects are also present when it comes to the population deprived of liberty. Factors related to incarceration, such as overcrowded cells, lack of access to basic resources, legal assistance and medical services within prison, contribute to the spread of TB⁽¹⁷⁾. Thus, we perceive the deficient health care provided by the State in the prison context, as if the fact of being imprisoned for having committed a crime, violated laws or other charges, not only allowed but justified "letting these precarious lives die", in to the detriment of "making life" of biopolitics⁽¹⁰⁾.

TB, a disease with a social cause, presents cases that are concentrated in populations living in vulnerable situations⁽⁴⁾, for which there is no access to conditions that enable them to choose healthy lifestyles^(6,11). From this perspective, precarious lives, that is, those exposed to the risk of becoming ill, are seen as "natural" — although they cause concern regarding the safety of the economically productive population, given the risk of contamination. At the same time, the precariousness of bodies is an important limitation of the care possible based on the current care model (biomedical). This is because, although studies have identified some initiatives by Nursing in unfavorable sociocultural contexts⁽¹⁾, such initiatives are more prevalent in extreme poverty countries in Africa and Asia, and are still incipient in the Brazilian context.

Finally, in relation to the fourth analytical category, "The discourse of the self-entrepreneurial subject to overcome poverty as compensation for the lack of social protection policies", it was observed that the recommendations relating to the needs of confronting SDH arise from discourses of overcoming poverty as a necessary condition for controlling TB. These discourses that encourage subjects to face structurally based socioeconomic problems emerged in the field of knowledge of Economics at the end of the 20th century. They were developed as a strategy to call on Latin American countries to face the negative transformations of capitalism, in an attempt to expand human possibilities and productivity around the aggregation of goods and services designed to

overcome fundamental deprivations⁽²⁴⁾. It is also important to highlight that the greatest representation of bacilliferous cases transmitting the disease that do not adhere to treatment are precisely vulnerable precarious bodies, that is, population deprived of liberty, people living with HIV/AIDS, homeless people and individuals living in contexts of poverty⁽²⁾.

At this point, we realize how problematic the definition of adherence in the current manual is(2), understood as collaborative behavior on the part of the subject undergoing treatment when taking the medication prescribed by the professional. From this perspective, we could think that, if the objective were to promote health and cure TB in the population most affected by the disease, we would have to admit that measures such as structural changes and government incentives could be more effective for people lacking basic living conditions than the call to "adopt collaborative behavior". Small social protection initiatives, such as income transfer programs (Bolsa Família, in Brazil)(25), have already been associated with favorable TB treatment outcomes. This fact corroborates the idea that non-adherence to TB treatment is more a result of the lack of social protection policies than of the individual's lack of self-control and willpower, as calling on individuals to overcome poverty and health difficulties disregards which is precisely the weakening of social protection systems that produces and maintains healthcare inequities and vulnerable situations.

For these reasons, we believe that the strengthening of social protection policies, the provision of government benefits and the provision of care based on the construction of a plan that considers the particularities of the context of each sick subject can configure different ways of providing care in health beyond the prescriptive norms that make up the neoliberal aspect of Health Promotion. Furthermore, given the fact that the association of TB with unfavorable socioeconomic conditions has been known for a long time(4,25), it is stated that TB control depends on the individual's ability to overcome poverty as a determining phenomenon for illness(2), it can put into operation discourses that operate strategically to reinforce the narrative that solutions to complex social problems(14) can be achieved through the willpower and commitment of the sick subject. Therefore, it is noteworthy that the ways in which certain Health Promotion practices are constituted today emerge and are legitimized, in accordance with the economic, political and social interests from which they are generated, sustained and replicated(11).

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Therefore, in view of this problem, it is understood that therapeutic adherence as a collaborative act becomes an efficient discourse for controlling TB for an individual personally committed to valuing their own health, capable of identifying and reducing vulnerabilities on their own⁽⁹⁾, and manage risks consciously and responsibly⁽⁸⁾. From the above, it is clear that the discourse of overcoming poverty with the objective of generating adherence to TB treatment through the enterprise of oneself exceeds the materiality of biomedical power or the disciplinary rules of an institution, as it is part of an articulated discursive order to a more astute project of our present time: the formation of the self-entrepreneurial subject⁽⁹⁾. Such a subject is tireless, produces uninterruptedly, maximizes his/her strengths, naturalizes risks and legitimizes the idea of health, education and leisure as products on a menu from which he/she has the freedom to choose(14), to enjoy a safe life, full of success and happiness.

FINAL CONSIDERATIONS

Analyzing the recommendations of TB control manuals as discursive practices from the perspective of Foucauldian studies made it noticeable that contemporary biopolitical strategies, in accordance with the economic and political interests of neoliberal rationality, are present in the healthcare sector. was possible to verify that this aims to guide the conduct of professionals and people undergoing treatment regarding the "best way" to face diseases that constitute risks to the population. Delegating TB control to the ability to adopt collaborative behaviors, especially when dealing with precarious bodies, corroborates the idea that some lives are worth more than others. In this sense, the biopolitical strategies present in the manuals do not improve any life and do not include the population in general.

Therefore, the results of this research point to the fact that, no matter how much the goals to be achieved change and no matter how much commitment and technical capacity the healthcare sector has, any effort undertaken is incapable of filling the void in social protection policies, necessary for TB control. This is because improvements to health in an equitable manner depend on different governmental responses, which are triggered based on different social, economic, and institutional capacities of less favored groups, as the risk of a given disease is not the same for everyone. Therefore, it is understood that new forms of care must be created and associated with policies that aim to reduce factors that contribute to vulnerable situations in the general population.

It is noteworthy that, despite the recognition of the efforts of international agencies, in particular the WHO, and national agencies, especially the Ministry of Health, in publishing manuals and organizing and implementing TB control plans and strategies, the socioeconomic context of most people with TB contribute to Brazil remaining a country with a high incidence of the disease. What is exposed in the present study is not about issuing a value judgment on the recommendations of the manuals analyzed, but about understanding them based on Foucault's notion of biopolitics. This understanding permeates the idea that the recommendations of these documents constitute temporal, social, political, and historical truths, as poverty and TB have always been associated.

Finally, as a limitation of this documentary research, the fact is that the guides analyzed here — as well as other documents produced within the scope of public policies — are dated documents, that is, published and disseminated in a certain space and time. It is expected, despite this recognized limitation, that the questions addressed here will be (above all) fertile and useful to produce other analyses, as well as for the construction of other forms of care in the context of TB control. Ways that can promote other approaches to health care and attention, going beyond the prescriptive norms of the health managerial logic and the neoliberal aspect of Health Promotion.

In this sense, we highlight the importance of other healthcare practices in the context of TB, encouraging the implementation of social protection policies associated with care that addresses the individual and collective needs of subjects undergoing treatment. We also highlight the need for a broader discussion, which includes the articulation of intersectoral actions, to reduce the distance between the healthcare sector, social assistance, civil society, and non-governmental entities.

REFERENCES

- Zago PTN, Maffacciolli R, Mattioni FC, Dalla-Nora CR, Rocha CME Nursing actions promoting adherence to tuberculosis treatment: scoping review. Rev Esc Enferm USP [Internet]. 2021 [Cited 2020 Aug 15];55:e20200300. Available from: https://doi. org/10.1590/1980-220X-REEUSP-2020-0300
- Ministério da Saúde (BR). Secretaria de Vigilância em Saúde, Departamento de Vigilância das Doenças Transmissíveis. Manual de recomendações para o controle da tuberculose no Brasil. Brasília: Ministério da Saúde; 2019[Cited 2020 Aug 15]. Available from: https://bvsms.saude.gov.br/bvs/publicacoes/ manual_recomendacoes_controle_tuberculose_brasil_2_ed.pdf
- Barbosa RJ, Souza PHGF, Soares SSD. Desigualdade de renda no Brasil de 2012 a 2019 [Internet]. Rio de Janeiro: IESP-UER.J; 2020[Cited 2020 Aug 15]. Available from: http://dados.iesp.uerj. br/desigualdade-brasil/
- Barreto FM, Silva MBP, Rodrigues BS, Silva Neto AG. Avaliação das condições socioeconômicas e epidemiológicas dos pacientes com

- tuberculose no Brasil entre 2012 e 2016. J Inter Bioc [Internet]. 2018[Cited 2020 Aug 15];3(2):35-8. Available from: https://www.researchgate.net/publication/330658784 Avaliacao das condicoes_socioeconomicas_e_epidemiologicas_dos_pacientes_com_tuberculose_no_brasil_entre_2012_a_2016
- Buss PM, Hartz ZMA, Pinto LF, Rocha CMF. Promoção da saúde e qualidade de vida: uma perspectiva histórica ao longo dos últimos 40 anos (1980-2020). Ciênc Saúde Colet [Internet]. 2020[Cited 2020 Aug 15]:25(12):4723-35. Available from: https://doi. org/10.1590/1413-812320202512.15902020
- Rosseto M, Hesler LZ, Maffacciolli R, Rocha CF, Oliveira DL. Comunicação para promoção da saúde: as campanhas publicitárias sobre tuberculose no Brasil. Rev Enferm UFSM [Internet]. 2017[Cited2020 Aug 15];7(1):18-28. Available from: https://doi. org/10.5902/2179769222801
- 7. Mattioni FC, Nakata PT, Dresh LC, Rollo R, Brochier LSB, Rocha FC. Health promotion practices and Michel Focault: a scoping review. Am J Health Promot [Internet]. 2021[Cited 2020 Aug 15];35(6):845-52. Available from: https://doi.org/10.1177/0890117121989222
- 8. Carvalho SR, Lima EMFA. Poderes da liberdade, governamentalidade e saberes psi: diálogos com Nikolas Rose (parte 2). Interface Comun Saúde Educ [Internet]. 2016[Cited 2020 Aug 15]; 20(58):797-808. Available from: https://doi.org/10.1590/1807-57622015.0888
- 9. Han BC. Sociedade do cansaço. 2ª ed. Petrópolis: Vozes; 2017.
- Foucault M. História da sexualidade: o uso dos prazeres. 2ª ed. Rio de Janeiro: Paz e Terra; 2017.
- Moraes DR. Castiel LD. O salutarismo de Robert Crawford e as atualizações do autoritarismo sanitário nosso de cada dia. Rev Electron Comun Inf Inov Saude [Internet]. 2019[Cited 2020 Aug 15];13(1):122-33. Available from: https://doi.org/10.29397/reciis. v13i1.1731
- 12. Queiroz F. A nova razão do mundo: ensaio sobre a sociedade neoliberal. Cad CRH [Internet]. 2018[Cited 2020 Aug 15];31(82):191-7. Available from: https://doi.org/10.1590/s0103-49792018000100012
- 13. Saraiva K. Diário de uma pesquisa off-road: análise de textos como problematização de regimes de verdade. Escritos metodológicos: possibilidade na pesquisa contemporânea em educação. Maceió: EDUFAL; 2009.
- 14. Lopes AMP. Promoção da saúde no processo de democratização brasileiro: biopolíticas e constituição de sujeitos da saúde. Fractal [Internet]. 2019[Cited 2020 Aug 15];31(3):283-91.Available from: https://doi.org/10.22409/1984-0292/v31i3/5509
- 15. Ministério da Saúde (BR). Secretaria de Políticas de Saúde, Departamento de Atenção Básica. Manual técnico para o controle da tuberculose: cadernos de atenção básica. Brasília: Ministério da Saúde; 2002[Cited 2020 Aug 15]. Available from: https://bvsms.saude.gov.br/bvs/publicacoes/manual_tecnico_controle_tuberculose_cab6.pdf
- 16. Ministério da Saúde (BR). Secretaria de Atenção à Saúde, Departamento de Atenção Básica. Vigilância em saúde: dengue, esquistossomose, hanseníase, malária, tracoma e tuberculose. Brasília: Ministério da Saúde; 2008[Cited 2020 Aug 15]. Available from: https://bvsms.saude.gov.br/bvs/publicacoes/ cab_n21_vigilancia_saude_2ed_p1.pdf
- 17. Ministério da Saúde (BR). Secretaria de Vigilância em Saúde, Departamento de Vigilância Epidemiológica. Manual de recomendações para o controle de tuberculose no Brasil. Brasília: Ministério da Saúde; 2011[Cited 2020 ago. 15]. Available from: https://bvsms.saude.gov.br/bvs/publicacoes/manual_recomendacoes_controle_tuberculose_brasil.pdf
- 18. Ministério da Saúde (BR). Secretaria de Vigilância em Saúde, Departamento de Vigilância Epidemiológica. Tratamento diretamente observado (TDO) da tuberculose na atenção básica: protocolo de enfermagem. Brasília: Ministério da Saúde; 2011 [Cited 2020 Aug 15]. Available from:Available from: https://bvsms.saude. gov.br/bvs/publicacoes/tratamento_diretamente_observado_tuberculose.pdf
- 19. Foucault M. Segurança, território e população: aula de 11 de janeiro de 1978. São Paulo: Martins Fontes; 2008.

- 20. Lupton D. Special section on 'Sociology and the Coronavirus (COVID-19) Pandemic'. Health Sociol Rev [Internet]. 2020[Cited 2020 Aug 15];29(2):111-2. Available from: https://doi.org/10.1080/14461242.2020.1790919
- 21. Meirelles I. Precariedade e biopolítica: uma leitura do dispositivo de segurança em Michael Foucault. Argumentos [Internet]. 2019[Cited 2020 Aug 15];16(1):232-48.Available from: https://doi.org/10.32887/issn.2527-2551v16n1p.232-24822
- Sevalho G. O conceito de vulnerabilidade e a educação em saúde fundamentada em Paulo Freire. Interface Comun Saúde Educ [Internet]. 2018[Cited 2020 Aug 15];22(64):177-88. Available from: https://doi.org/10.1590/1807-57622016.0822
- 23. Lages SRC, Silva AM, Silva DP, Damas JM, Jesus MA. O preconceito racial como determinante social da saúde: a invisibilidade da anemia falciforme. Rev Interinst Psicol. [Internet]. 2017 [Cited 2020 Aug 15];10(1):109-22. Available from: http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1983-82202017000100011
- 24. Mello J. Estratégias de superação da pobreza no Brasil e impactos no meio rural. Rio de Janeiro: IPEA; 2018.
- Oliosi JGN, Reis-Santos B, Locatelli RL, Sales CMM, Silva Filho WG, Silva KC, et al. Effect of the Bolsa Familia Programme on the outcome of tuberculosis treatment: a prospective cohort study. Lancet Glob Health [Internet]. 2019[Cited 2020 Aug 15];7(2):219-26. Available from: https://doi.org/10.1016/S2214-109X(18)30478-9