

# Professional skills for health promotion in caring for tuberculosis patients

Competências profissionais de promoção da saúde no atendimento a pacientes com tuberculose Habilidades profesionales para la promoción de la salud en el cuidado de pacientes con tuberculosis

Amanda de Fátima Alves Costa<sup>1</sup> ORCID: 0000-0002-3912-9739

Altamira Mendonça Félix Gomes<sup>1</sup> ORCID: 0000-0002-5760-4492

Ana Fátima Carvalho Fernandes<sup>1</sup> ORCID: 0000-0001-6350-0641

Lucilane Maria Sales da Silva<sup>II</sup> ORCID: 0000-0002-3850-8753

> Lorena Pinheiro Barbosa<sup>I</sup> ORCID: 0000-0002-8006-7517

> Priscila de Souza Aquino<sup>1</sup> ORCID: 0000-0003-4976-9817

¹Universidade Federal do Ceará. Fortaleza, Ceará, Brazil. ªUniversidade Estadual do Ceará. Fortaleza, Ceará, Brazil.

#### How to cite this article:

Costa AFA, Gomes AMF, Fernandes AFC, Silva LMS, Barbosa LP, Aquino PS. Professional skills for health promotion in caring for tuberculosis patients.

Rev Bras Enferm. 2020;73(2):e20180943.
doi: http://dx.doi.org/10.1590/0034-7167-2018-0943

#### Corresponding Author:

Altamira Mendonça Félix Gomes E-mail: mirasul18@hotmail.com



EDITOR IN CHIEF: Dulce Aparecida Barbosa ASSOCIATE EDITOR: Elucir Gir

**Submission:** 12-07-2018 **Approval:** 08-13-2019

#### **ABSTRACT**

**Objectives:** to understand the health promotion skills found in the speeches of health practitioners in care for TB patients. **Methods:** qualitative study, developed with seven practitioners involved in care for TB patients, identified from a sociocentric approach, whose speeches were submitted to analysis based on the health promotion skills model in the Galway Consensus. **Results:** there were four domains: Catalyzing change; Leadership; Planning; and Partnerships. These domains resulted from health education actions, contribution of management nursing practitioners, seeking to meet patients' needs and articulation of professional sectors. **Final considerations:** there were some skill domains in the speeches of health practitioners, with the nurse being quoted in the development of essential skills for health promotion activities, such as catalyzing change and leading care for TB patients.

**Descriptors:** Health Promotion; Tuberculosis; Primary Health Care; Health Personnel; Comprehensive Health Care.

#### RESUMO

Objetivos: compreender as competências de promoção da saúde encontradas nas falas de profissionais de saúde no atendimento a pacientes com tuberculose. Métodos: estudo qualitativo, desenvolvido com sete profissionais envolvidos no atendimento a pacientes com tuberculose, identificados a partir de abordagem sociocêntrica, cujas falas foram submetidas à análise com base no modelo de competências para promoção da saúde presentes no Consenso de Galway. Resultados: evidenciaram-se quatro domínios: Catalisar mudanças; Liderança; Planejamento; e Parcerias. Esses domínios resultaram das ações de educação em saúde, da contribuição dos profissionais enfermeiros na gestão, busca de atendimento às necessidades dos pacientes e articulação de setores profissionais. Considerações finais: constatou-se a presença de alguns domínios de competências nas falas dos profissionais de saúde, com a citação do enfermeiro no desenvolvimento de competências essenciais para a realização de atividades promotoras de saúde, como a catalisação de mudanças e a liderança no acompanhamento de pacientes com tuberculose. Descritores: Promoção da Saúde; Tuberculose; Atenção Primária à Saúde; Pessoal de Saúde; Assistência Integral à Saúde.

#### **RESUMEN**

Objetivos: comprender las habilidades de promoción de la salud que se encuentran en las declaraciones de los profesionales de la salud en la atención de pacientes con tuberculosis. Métodos: estudio cualitativo, desarrollado con siete profesionales involucrados en el cuidado de pacientes con tuberculosis, identificados desde un enfoque sociocéntrico, cuyos discursos fueron sometidos a análisis basados en el modelo de competencias de promoción de la salud presente en el Consenso de Galway. Resultados: se evidenciaron cuatro dominios: catalizar cambios; Liderazgo; Planificación; y Asociaciones. Estos dominios resultaron de acciones de educación para la salud, la contribución de enfermeras profesionales en la gestión, buscando satisfacer las necesidades de los pacientes y la articulación de sectores profesionales. Consideraciones finales: se encontró la presencia de algunos dominios de competencias en los discursos de profesionales de la salud, con la cita de la enfermera en el desarrollo de competencias esenciales para realizar actividades de promoción de la salud, como catalizar el cambio y liderar el monitoreo de pacientes con tuberculosis

**Descriptores:** Promoción de la Salud; Tuberculosis; Atención Primaria de Salud; Personal de Salud; Atención Integral de Salud.



#### **INTRODUCTION**

Tuberculosis is a serious public health problem worldwide and is responsible for the death of thousands of people. It is estimated in 2017 that 10.0 million people have developed the disease worldwide, including 5.8 million men, 3.2 million women and 1.0 million children<sup>(1)</sup>.

Brazil is among the countries with the highest number of tuberculosis cases in the world, in which 69,000 people fell ill and 4,500 men, women and children died in 2015. A study indicates that the disease incidence decreased from 42.7 in 2001 to 34.2 cases per 100 thousand inhabitants in 2014. In the state of Ceará, the TB incidence decreased from 39.4 in 2013 to 38.3 per 100 thousand inhabitants in 2017<sup>(2-3)</sup>.

In Brazil, since 2003, tuberculosis has been a priority on the political agenda of the Ministry of Health. The effort to change the Brazilian context regarding disease incidence and mortality for the action of those involved in tuberculosis control. These bodies were Ministry of Health, State and Municipal Health Offices, academies, organized civil society and other key sectors<sup>(4)</sup>.

Recently, the *Plano Nacional pelo Fim da Tuberculose como Problema de Saúde Pública* (Brazilian National Plan to End Tuberculosis as a Public Health Problem), launched in 2017, was built. A goal was establishment in order to reduce the incidence rate to less than 10 cases per 100,000 inhabitants and reducing the mortality rate due tuberculosis to less than 1 death per 100,000 inhabitants by 2035. In order to reach these goals, there are pillars, one of which deals with prevention and integrated patient-centered care. Several strategies are guided, such as strengthening civil society participation in coping strategies, supporting communication actions, advocacy and social mobilization by civil society. Mobilization aims to seek methods that consolidate prevention, diagnosis and disease treatment triad<sup>(5)</sup>.

In the state of Ceará, the *Plano Estadual de Vigilância e Controle da Tuberculose 2018-2020* (State Plan for Tuberculosis Surveillance and Control 2018-2020) has as one of its specific objectives the prevention and comprehensive care for people with tuberculosis. Decrease in treatment withdrawal rate in 2016 was 10.3% and a challenge to be overcome. Cure in Ceará in 2017 was 65.8%, still below the recommended by the World Health Organization, which is 85% or more<sup>(6)</sup>.

Given the local differences in the application of strategies to fight tuberculosis, settings were established to be worked on, identified from socioeconomic, epidemiological, and operational indicators. Each setting has characteristics that facilitate individual planning of actions of states and municipalities and identification of priorities to be worked on in each of these. Moreover, the need to plan actions directed to the country reality in a more efficient manner is pointed out, in order to reduce the incidence and increase the effectiveness of tuberculosis treatment<sup>(5)</sup>.

One of the strengths of tuberculosis control actions is the decentralization of tuberculosis detection, diagnosis and follow-up actions to Primary Care. In this process, adherence to treatment assumes great relevance<sup>(4-5)</sup>.

One of the salient aspects for the increased efficiency in TB patients treatment is bond formation between patient and

practitioner, presenting as a predisposing factor in the individual follow-up. Bond formation, along with health-promoting actions, especially in the context of Primary Health Care (PHC), is characterized as a tool for providing information, encouragement and accountability of individuals in health-promoting actions, resulting in bonding and patient empowerment<sup>(7)</sup>.

A study that aimed to rescue the social representations of health practitioners and patients in the diagnosis of tuberculosis showed that there may be impairment in treatment and their continuity when there is no bond. It has been reported that the way in which news of the patient's condition is given to the person, directly and with little explanation, did not contribute to treatment adherence and that along with disrespect and inattention of service could lead some to treatment withdrawal<sup>(8)</sup>.

Therefore, it is opportune that health practitioners involved in care for TB patients develop characteristics that enable them to effectively implement health promotion actions<sup>(9)</sup> to overcome settings such as those found in research with practitioners who have already followed TB patients. Despite the efforts, these practitioners still have gaps to be worked out regarding care for these patients. Some topics, such as scheduling care, laboratory back-up, professional training, case identification in the community were considered to be of reasonable ability<sup>(10)</sup>.

Therefore, health promotion is vital in improving general health, with a view to meeting the needs of the population<sup>(9)</sup>. From the perspective of health promotion, it is intended that care for the population undergoing treatment for tuberculosis be guided by skills. In this regard, the Galway Consensus, established at the Galway Conference in 2008, presents shared perceptions of practitioners to improve training workforce and standards for effective health promotion practice. These practitioners agreed on core values and principles, common definition and eight core skill domains to achieve health improvements<sup>(9)</sup>.

The proposal to work on health promotion through essential skills aims to allow the implementation of professional practice guided by principles and domains that make their actions in the control of infectious diseases more effective. The analysis of health practitioners reports directly involved with care for TB patients aims to contribute to this process and may provide valuable results. Therefore, there is identification of the weaknesses present in the daily life of these practitioners and assist in conducting training that will remedy the existing gaps.

Before approaching the collective practices laboratory, which focused on professional social networks and participation in care for TB patients, with a view to health promotion, proposed to combine the two experiences and identify, in a new study, the answer to the following question: "What are the health promotion skills found in the health practitioners speeches in care for patients diagnosed with tuberculosis, in the light of the Galway Consensus?". This question was created aiming to enable critical reflections that lead to the improvement of care for these practitioners and the good quality of continuous care.

# **OBJECTIVES**

This study aims to understand the health promotion skills found in the speeches of health practitioners in care for TB patients.

#### **METHODS**

### **Ethical aspects**

The study complied with the criteria contained in Resolution 466/2012 of the Brazilian National Health Board (*Conselho Nacional de Saúde*), which deals with research with human beings. The project was submitted to the Research Ethics Committee. Participants were informed about the study and they signed the Free and Informed Consent Term.

#### Theoretical-methodological framework

The study is consisted of the Galway Consensus that was established at the 2008 Galway Conference in Ireland. At this conference, held with leading authorities in health promotion, health education, and public health, aspects related to health promotion capacity building were discussed. Participants reached consensus on the values, principles and eight key skill domains needed to develop effective health promotion practices. Catalyzing change, Leadership, Needs Assessment, Planning, Implementation, Impact Assessment, Advocacy and Partnerships were the eight skill domains. This consensus is intended for all who have participation and responsibility in promoting public health<sup>(9)</sup>.

## Type of study

This is a qualitative study conducted with seven health practitioners working with TB patients in a city in the metropolitan region of Fortaleza, state of Ceará, Brazil.

# **Methodological procedures**

The analysis of social networks with a sociocentric approach was used, proposing to study the links between the numerous practitioners involved in care for tuberculosis cases in the context of the Family Health Strategy (FHS).

After contact with the Municipal Health Office and identification of the 3 units that had the largest number of patients under tuberculosis follow-up in the municipality central area, practitioners were searched. Twenty-seven practitioners working in care for TB patients were identified in these units. Of these, 11 practitioners participated in the first stage of the study (three nurses, two physicians, three Community Health Agents and three nursing technicians).

For these 11 selected practitioners, the following guiding question was asked: "In order of importance, which 3 practitioners do you trigger in TB patients follow-up?". This question was created in order to identify the three individuals who were characterized as contacts, mediators, facilitators of access to the most active users during care for TB patients. From the references identified by practitioners in social network formation in the monitoring of TB patients, the software UCINET<sup>(C)</sup> was used to map the social network. After identifying the actors with the greatest influence on the network, identified with the aforementioned software use and professional social network formation for care for TB patients, the most cited and highly influential in tuberculosis treatment in the municipality totaled seven practitioners who answered the interview. These practitioners were from different work institutions.

The second stage of the study, interview, included 7 FHS practitioners involved in care for TB patients, 5 nurses, a Community Health Agent and a physician. Participants were identified by their profession and, if necessary, by consecutive numbering of Arabic numerals, consisting of nurses (NUR) 1,2,3,4,5, with participants 3 and 5 exercising coordination positions in care networks for TB patients, physician (PHY) and Community Health Agent (CHA). It is noteworthy that in the speeches of NUR 2 and CHA, they did not have the health promotion skill domains that were constant in the Galway Consensus and identified in their speeches, because their presence in the results was not perceived.

#### Study setting

According to the Brazilian National Plan for the End of Tuberculosis as a Public Health Problem, the country was divided into 2 settings (1 and 2) and 8 sub-settings (1.0, 1.1, 1,2, 1,3, 2.0, 2.1, 2.2, 2.3). The socioeconomic, epidemiological and operational conditions of tuberculosis were considered<sup>(1)</sup>. Setting 1 has better socioeconomic and operational conditions, while setting 2 is less favored. Ceará has 20 municipalities in setting 1 and 164 municipalities in setting 2. The study took place in a city in the metropolitan region of Fortaleza, state of Ceará, Brazil, which belongs to the sub-setting 2.3. This sub-setting has the second highest tuberculosis mortality coefficient among all sub-settings<sup>(5-6)</sup>.

#### Collection and organization of data

From May to September 2016, a Master's student researcher in clinical care in nursing and health, with experience in care for TB patients, was responsible for conducting the interviews. After presenting this researcher to the candidates participating in this study, the objectives of this study were clarified and the Free and Informed Consent Term was signed. Semi-structured interviews were conducted, with a script consisting of questions that aimed to know the alternatives used and the influence exerted by these practitioners on the care network for TB patients.

To capture with greater reliability and ensure information confidentiality, the interviews were conducted in a private environment, face to face with the interviewee, individually, and recorded with sound recording device, free from the intervention of others, with an average duration of 30 minutes each. Data were later transcribed and transcripts were not returned to participants.

## **Data analysis**

The interviews were subjected to content analysis, where preanalysis, coding and result treatment obtained and interpretation were performed<sup>(11)</sup>. Health promotion practice was based on the eight skill domains<sup>(9)</sup>.

#### **RESULTS**

The categories composed by the Galway Consensus<sup>(9)</sup> skill domains are presented in order to provide reflection on the process of monitoring PHC practitioners in care for TB patients. The speeches highlighted the *Catalyzing change; Leadership; Planning*; and *Partnerships* domains.

## Health promotion skills domain: catalyzing change

Catalyzing change was identified from health promotion approaches taken by health practitioners, supporting the empowerment of individuals with regard to treatment, participation and facilitation of personal skills development in improving health conditions.

Exactly, they have an educational session, usually at the front door on Tuesday, done by the nurse, but if I'm busy, the technician goes there. (NUR 4)

Practitioner placement indicates that educational actions were performed in care for patients who begin treatment in the health unit. This domain refers to the creation of environments and configurations of health promoting actions, seeking to use approaches that strengthen the participation and appropriation of individuals in the protagonism of their own treatment.

## Health promotion skills domain: leadership

This domain was evidenced through the participation of nursing practitioners in leadership actions, in which the contribution to resource management in health promoting activities is demonstrated and recognized.

> Culturally, this function is seen in nursing to be a manager so, there is a nursing culture to take things to itself, in order to take responsibility for the patient. (NUR 3)

It was possible to notice the prominence of nursing in patient care management, involving direct actions with the individual and other practitioners in the search for health-promoting strategies.

... the nurse is very important in monitoring TB patients. (PHY)

## Health promotion skills domain: planning

Care for TB patients requires actions that involve the peculiarities of the disease, requiring practitioners to plan directed to meet the demands, according to the needs observed and experienced.

When we know that you are a TB patient, you already have a more welcoming, specific look, so we say: arrive at 10 o'clock so you don't stay in the cluster, so we have a well prioritized service, got it?! (NUR 1)

*Planning* was identified in strategies designed to achieve goals and objectives, such as diagnosis and early disease treatment.

Managers seek to streamline processes, examinations, treatment, everything. And also one thing that I think is important, as there is demand, there is a solution too ... so it's fast and good. (PHY)

# Health promotion skills domain: partnership

From the speeches, it was possible to perceive mobilization among various care sectors for patient care. The articulation and motivation to improve care, reducing inequalities, became evident.

If I don't know, I'll go to the program manager, how does the network really work, what would the flow really have or doesn't have? And discuss what we could do to meet the demand. (NUR 5) It was verified the work between the sectors and partners, care and management for formation of shared vision and strategic direction for care for TB patients, with wide cooperation.

Therefore, when we see that treatment is not being efficient, that patients are resisting some of the treatment medications, we get in touch with the head of the outpatient physiology department. (NUR 1)

#### DISCUSSION

Catalyzing change is characterized by actions that are directed towards individual empowerment of groups and communities to promote health and reduce disparities<sup>(12)</sup>, aimed at facilitating and developing personal skills<sup>(13)</sup>. From the speeches, it was noticed the performance of nursing practitioners from the performance of educational activities with patients.

The role of nurses in PHC is presented as a tool for change in health care practice, meeting the demand for a care model centered on comprehensive care for the individual<sup>(14)</sup>.

From the speeches, there was a restricted direction of PHC practitioners' performance in carrying out specific, often individual, educational actions related to the disease, which can be partly explained by the workload of health practitioners<sup>(15-16)</sup>. Moreover, educational actions should be directed to the needs of individuals and communities through planning for implementation stands out. Therefore, there is a search for awareness and sensitization of these<sup>(17)</sup>. Thus, bonds are created between those involved that have been shown to assist in adherence to treatment<sup>(18)</sup>.

However, something different is actually observed. Study identified that the education model for patients about the disease is still based on traditional education and not on their protagonism as to their health situation<sup>(8)</sup>. Other research also revealed that educational actions were carried out in educational campaigns or when cases of tuberculosis in the territory increased. When they happened, these consisted of the distribution of printed material and lectures, and were hampered by the lack of professional qualifications<sup>(17)</sup>.

Although many educational strategies are based on materials already produced, this attitude deserves reflection. A study that aimed to analyze the content of advertising campaigns on tuberculosis, produced in Brazil by the Ministry of Health, identified that despite their efforts to raise awareness and change the habits of the population, the way they are produced and transmitted does not make this reality possible. These strategies were shown outside the sociodemographic context in which people find themselves<sup>(19)</sup>.

There were different realities present in Brazil. A study aimed at investigating the provision of educational and health promotion actions in PHC and their association with FHS demographic and coverage factors, in southern Brazil, found that the likelihood of tuberculosis prevention actions being offered. TB is 23% higher in the municipalities with the highest Municipal Human Development Index. It was also noted the need for further actions to prevent tuberculosis and leprosy<sup>(20)</sup>.

As for *Leadership*, this was represented as an effective action by health practitioners in monitoring patients and during disease treatment. This domain involves opportunity strategies for participation in policy development, mobilization and resource management for health promotion<sup>(13)</sup>. The nurse was the practitioner cited as the leader in the monitoring of TB patients, receiving a prominent role in the development of this domain.

It is also about using one's skills to facilitate empowerment and participation, including teamwork, conflict resolution and decision-making, facilitation and problem-solving<sup>(9,13)</sup>. In the pursuit of humanized care focused on solving the challenges encountered, problem solving and decision-making are facilitated by establishing bonds of trust<sup>(16)</sup>.

Analysis of nurses' skills in preventing falls in hospitalized children, in the light of the Galway Consensus, identified that among these, the Leadership domain was present in all actions. It also found that continuing education for the implementation of a practice based on health promotion is considerable<sup>(21)</sup>.

The role of nurses in care management is one of the main axes in the professional performance of the category, including articulation between care and management in activity performance<sup>(22)</sup>. This setting makes them contributors to the efforts to change the setting currently observed in Brazil regarding tuberculosis incidence and mortality. Health practitioners are called to action in order to strengthen alliance between policy makers, civil society and the community, contributing to the general mobilization towards the goal of reducing the rates observed in the country<sup>(5)</sup>.

However, this apparent centralization of tuberculosis follow-up and monitoring information with nurses requires attention so that other health team members are not distanced from tuberculosis control actions in services<sup>(23)</sup>.

*Planning*, with the development of measurable goals and objectives in response to the needs assessment, aims to identify knowledge-based strategies resulting from theory, evidence and practice<sup>(9)</sup>.

It was observed in the speeches of practitioners that they were aware of the importance of planning the actions to be implemented in care for TB patients. There was a difference in findings when compared to another study conducted with PHC patients, which showed that nurses did not report planning actions in daily activities<sup>(24)</sup>. Organized care sequence creation facilitates flow and optimizes treatment initiation and continuity. Planning actions are key to strengthening access to tuberculosis prevention, diagnosis and treatment, with a view to improving indicators at local and national levels, overcoming barriers and reducing mortality rates<sup>(5)</sup>.

Planning also involves pondering the entire patient care process, as lack of inputs can lead to failures and late diagnosis. A study conducted in southern Brazil in PHC units points out that the absence of respiratory symptomatic record books, lack of sputum smear form and pots for sample preparation were observed in some units. In addition to the lack, in other units, of the specific location for bacilloscopy collection, collection at the users' residence was indicated by practitioners. It was found the presence of attributes that increase the possibilities of health care discontinuity and wide turnover of practitioners working in care for the population<sup>(25)</sup>.

For tuberculosis control and treatment actions to be implemented efficiently, it is essential that the team involved in the process be fully familiar with and updated with new models of systematic approaches to the disease. They should also have a

broad individual and collective focus, going beyond biological facts but also addressing social and cultural factors<sup>(9,13,26,27)</sup>. Good embracement establishment favors the provision of information to users, allows closer targeting and encourages adherence to treatment<sup>(28-29)</sup>.

With regard to *Planning*, practitioners should have the conception that mobilization, support and stakeholder involvement is very relevant<sup>(13)</sup>. As it is a disease whose completion of all treatment in a timely manner is extremely significant, calling for the participation of all in planning of conducts in tuberculosis control actions takes over a fundamental role. One of the challenges to be overcome is treatment withdrawal, which can have serious consequences as a source of persistent infection, transmission and increased mortality and relapse rates. In addition, this withdrawal can lead to resistant bacillus strain evolution, making it difficult to cure, increasing treatment time and expenses<sup>(2,5)</sup>.

Partnerships were evidenced by the observed need for the formation of a support network for the effective care for TB patients and the existence of several partners that facilitate care for them. This domain is characterized by collaborative work across disciplines, sectors, partners, with a view to achieving better health promotion levels<sup>(9,28)</sup>.

Partnerships are essential in providing care in all fields related to health. It was verified, in the speeches of the practitioners of this study, the presence of evocation to collaboration. Participation of partners from different sectors can facilitate effective collaborative work. However, there is a requirement not only to allude to managers such as great allies, but also to practitioners and users, with greater training and appreciation of all<sup>(13,30)</sup>.

Nevertheless, from periodic discussions, with constant observation of indicators and strategy directions for the main barriers encountered and with the drawing up of resolute proposals and new goals to be met, care for such patients will be more specific and focused on changing the current context<sup>(10)</sup>.

Encouraging civil society and collaborators participation in TB coping strategies increases the chances of success. Strengthening integration with academic and research institutions also contributes to the development of concrete and successful practices<sup>(5)</sup>.

The development of essential skills in health promotion enables the actions involved in the whole process of health care to be performed efficiently, effectively and appropriately, thus constituting a basic subsidy for health practitioners<sup>(13)</sup>.

#### **Study limitations**

Restricted possibility of generalizing the results in a broader context stands out, since speeches of practitioners analyzed were restricted to a single Brazilian reality and specific care, that of TB patients.

#### Contributions to nursing, health or public policy fields

From the understanding about the skills of health practitioners involved in care for TB patients, we can plan and direct actions focused on improving professional practice. Thus, it would improve practitioners' performance in order to perform health-promoting activities more effectively, especially in PHC.

#### **FINAL CONSIDERATIONS**

Catalyzing change, Leadership, Planning, and Partnerships were present in this study. Needs Assessment, Implementation, Impact Assessment; and Advocacy were absent in this study.

Nurses were mentioned in the development of essential skills

for health promotion activities, such as catalyzing change and leading the monitoring of TB patients.

These facts lead to the reflection on the need for increased actions aimed at health promotion with this population and expansion of training and awareness raising of practitioners involved in this service to perform a holistic and comprehensive approach.

#### **REFERENCES**

- 1. World Health Organization. Global tuberculosis report 2018 [Internet]. 2018 [cited 2019 Jun 10]. Geneva: World Health Organization; Available from: https://www.who.int/tb/publications/global\_report/en/
- Secretaria da Saúde do Estado do Ceará. Coordenadoria de Promoção e Proteção à Saúde. Núcleo de Vigilância Epidemiológica. Secretaria da Saúde do Estado do Ceará. Boletim Epidemiológico Tuberculose [Internet]. 2018 [cited 2019 Jun 10]. Available from: http://www.saude. ce.gov.br/download/boletins/
- Ministério da Saúde (BR). Secretaria de Vigilância em Saúde. Perspectivas brasileiras para o fim da tuberculose como problema de saúde pública [Internet]. 2016 [cited 2019 Jun 10]. Available from: http://portalarquivos.saude.gov.br/images/pdf/2017/marco/23/2017-V-48-N-8-Indicadores-priorit--rios-para-o-monitoramento-do-Plano-Nacional-pelo-Fim-da-Tuberculose-como-Problema-de-Sa--de-P--blica-no-Brasil.pdf
- 4. Ministério da Saúde (BR). Secretaria de Vigilância em Saúde. Departamento de Vigilância das Doenças Transmissíveis. Avaliação da Gestão do Programa Nacional de Controle da Tuberculose [Internet]. 2015 [cited 2019 Jun 10]. Available from: http://portalarquivos2.saude.gov.br/images/pdf/2015/maio/11/avaliacao-qestao-PNCT-4maio15-isbn-final.pdf
- 5. Ministério da Saúde (BR). Secretaria de Vigilância em Saúde. Departamento de Vigilância das Doenças Transmissíveis. Brasil Livre da Tuberculose: Plano Nacional pelo Fim da Tuberculose como Problema de Saúde Pública [Internet]. 2017 [cited 2019 Jun 10]. Available from: http://portalarquivos2.saude.gov.br/images/pdf/2017/junho/29/plano\_nacional\_tb\_web.pdf
- 6. Secretaria da Saúde do Estado do Ceará. Plano Estadual de Vigilância e Controle da Tuberculose. [Internet]. 2018 [cited 2019 Jun 10]. Available from: http://saude.ce.gov.br/index.php/downloads
- 7. March A, Torres E, Ramos M, Ripoll J, Garcia A, Bulilete O, et al. Adult community health-promoting interventions in primary healthcare: a systematic review. Prev Med. 2015;76(2015):94-104. doi: 10.1016/j.ypmed.2015.01.016
- 8. Oliveira RA, Lefèvre F. Communication on disclosure of tuberculosis diagnosis and adherence to treatment: social representations of professionals and patients. Texto Contexto Enferm, 2017;26(2):e06790015. doi: 10.1590/0104-07072017006790015
- 9. Allegrante JP, Barry MM, Airhihenbuwa CO, Auld ME, Collins JL, Lamarre MC, et al. Domains of core competency, standards, and quality assurance for building global capacity in health promotion: the Galway Consensus Conference Statement. Health Educ Behav. 2009;36(3):476-82. doi: 10.1177/1090198109333950
- 10. Santos MC, Andrade RPS, Macedo SM, Andrade ASS, Villa TCS, Pinto ESG. Organization of primary healthcare services for tuberculosis diagnosis and treatment. Cogitare Enferm. 2017;(22)2:e48151. doi: 10.5380/ce.v22i1.4815
- 11. Bardin L. Análise de conteúdo. São Paulo: Edições 70; 2011.
- 12. Barry CE, Boshoff H, Dartois V, Dick, T, Ehrt S, Flynn J, et al. The spectrum of latent tuberculosis: rethinking the goals of prophylaxis. Nat Rev Microbiol. 2009;7(12):845-55. doi: 10.1038/nrmicro2236
- 13. Dempsey C, Battel-Kirk B, Barry MM. The compHP core competencies framework for health promotion handbook [Internet]. 2011 [cited 2019 Jun 15]. Available from: http://www.szu.cz/uploads/documents/czzp/nerovnosti/2011/5.\_CompHP\_Core\_Competencies\_Framework\_for\_Health\_Promotion\_Handbook\_revised.pdf
- 14. Ferreira SRS, Périco LAD, Dias VRFG. The complexity of the work of nurses in Primary Health Care. Rev Bras Enferm. 2018;71(Suppl 1):704-9. doi: http://dx.doi.org/10.1590/0034-7167-2017-0471
- 15. Cecilio HPM, Marcon SS. Health personnel's views of directly observed treatment of tuberculosis. Rev Enferm UERJ. 2016;24(1):e8425. doi: 10.12957/reuerj.2016.8425
- 16. Andrade ME, Clares JWB, Barretto EMF, Vasconcelos EMR. Nurses' perceptions of their educational role in the family health strategy. Rev Enferm UERJ. 2017;24(4):e15931. doi: 10.12957/reuerj.2016.15931
- 17. Sá LD, Gomes ALC, Carmo JB, Souza KMJ, Palha PF, Alves RS, Andrade SLE. [Health education in tuberculosis control: the perspective of Family Health strategy professional]. Rev Eletr Enf. 2013;15(1):103-11. doi: 10.5216/ree.v15i1.15246 Portuguese.
- 18. Ferreira RCZ, Caliari JS, Figueiredo RM. Concepts of nurses on supervised treatment of tuberculosis in Brazil. Riase O. 2015;1(2):219-32. doi: 10.24902/r.riase.2015.1(2).219
- 19. Rossetto M, Hesler LZ, Maffacciolli R, Rocha CF, Oliveira DL. [Communication for health promotion: the advertising campaigns on tuberculosis in Brazil]. Rev Enferm UFSM. 2017;7(1):18-28. doi: 10.5902/2179769222801 Portuguese.
- 20. Kessler M, Thumé E, Duro SMS, Tomasi E, Siqueira FCV, Silveira DS, et al. Health education and promotion actions among teams

- of the National Primary Care Access and Quality Improvement Program, Rio Grande do Sul state, Brazil. Epidemiol Serv Saúde. 2018;27(2):e2017389. doi: 10.5123/s1679-49742018000200019
- 21. Gurgel SS, Ferreira MKM, Sandoval LJS, Araújo PR, Galvão MTG, Lima FET. Nursing competences in the prevention of falls in children in light of the Galway Consensus. Texto Contexto Enferm. 2017;26(4):e03140016. doi: 10.1590/0104-070720170003140016
- 22. Copelli FHS, Oliveira RJT, JLG, Magalhães ALP, Gregório VRP, Erdmann AL. Care management and nursing governance in a maternity ward: grounded theory. Rev Bras Enferm. 2017;70(6):1277-83. doi: 10.1590/0034-7167-2016-0116
- 23. Wysockil AD, Ponce MAZ, Brunello MEF, Beraldo AA, Vendramini SHF, Scatena LM, et al. Primary Health Care and tuberculosis: services evaluation Rev Bras Epidemiol. 2017;20(1):161-175. doi: 10.1590/1980-5497201700010014
- 24. Silva NCO, Machado ALG, Maniva, SJ, Freitas SJC, Vieira NFC, Carvalho ZMF, et al. Competencies of nurses for the promotion of men's health. Indian J App Res [Internet]. 2015 [cited 2019 J6n 10];5(1):500-2. Available from: http://www.repositorio.ufc.br/bitstream/riufc/14503/1/2015\_art\_ncosilva.pdf
- 25. Spagnolo LML, Tomberg JO, Martins MDR, Antunes LB, Gonzales RIC. Detection of tuberculosis: the structure of primary health care. Rev Gaúcha Enferm. 2018;39:e20180157. doi: 10.1590/1983-1447.2018.20180157
- 26. Oblitas FYM, Loncharich N, Salazar ME, David HML, Silva I, Velásquez D. Nursing's role in tuberculosis control: a discussion from the perspective of equity. Rev Latino-Am Enfermagem 2010;18(1):130-8. doi: 10.1590/S0104-11692010000100020
- 27. Queiroga RPF, Sá LD, Gazinelli A. A tuberculose na população em situação de rua: desempenho de profissionais da atenção primária. Rev Rene. 2018;19:e32463. doi: 10.15253/2175-6783.20181932463
- 28. Negri LSA, Villa TCS, Motta MCS, Zandonade E, Prado TN, Maciel ELN. [Patient satisfaction with tuberculosis health services in the city of Vitoria/ES]. Rev Bras Pesq Saúde [Internet]. 2015 [cited 2019 Jun 10];17(4):98-108. Available from: http://periodicos.ufes.br/RBPS/article/view/14336/10081 Portuguese.
- 29. Macedo SM, Andrade RPS, Souza CRBA, Andrade ASS, Villa TCS, Pinto ESG. Strategies for tuberculosis care training. Cogitare Enferm. 2016;21(3):1-8. doi: 10.5380/ce.v21i3.45339
- Scatolin BE, Pinto ESG, Arcêncio RA, Andrade RLP, Wysocki AD, Ponce MAS, et al. Active case finding: community health workers' activity related to tuberculosis control in a large city, Brazil. Texto Contexto Enferm. 2014;23(2):261-9. doi: 10.1590/0104-07072014001600012