



# Professional training in leprosy in Primary Health Care: a scoping review protocol

# Capacitação profissional em hanseníase na Atenção Primária à Saúde: protocolo de revisão de escopo

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**Objetivo:** Descrever a sistematização do desenvolvimento de uma revisão de escopo para mapear evidências científicas relativas à capacitação profissional da equipe de assistência ao paciente em hanseníase na Atenção Primária à Saúde. **Método:** Fundamentar-se-á nas recomendações do *Preferred Reporting Items for Systematic and Meta-Analyses - Extension for Scoping Reviews* (PRISMA-ScR), atendendo às orientações do Instituto Joanna Briggs. Espera-se que as evidências encontradas na literatura nacional e internacional possam direcionar profissionais e gestores na implementação de ações de controle e eliminação da hanseníase como problema de saúde pública, por meio da educação.

**Descritores:** Revisão de Escopo; Capacitação de Recursos Humanos em Saúde; Hanseníase.

#### ABSTRACT

**Objective:** To describe the systematization of a scoping review to map scientific evidence related to the professional training of the members of the leprosy primary health care team. **Method:** The recommendations of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR) will be met, as well as the Joanna Briggs Institute's guidelines. It is expected that the evidence found in the national and international literature can guide professionals and managers in implementing actions to control and eliminate leprosy, a public health problem, through education.

Descriptors: Scoping Review; Health Human Resource Training; Leprosy.

#### INTRODUCTION

Leprosy is a chronic disease that predominantly affects the skin and peripheral nerves, with long-term consequences that include deformities and disabilities. Leprosy is one of the neglected diseases, defined as diseases that generate high human, social and economic consequences, afflicting vulnerable and marginalized populations<sup>(1-2)</sup>.

In 2018, the global leprosy detection rate was 2.74 cases per 100,000 inhabitants, despite the global decrease compared to the previous year. Brazil, which is among the countries with high burdens of the disease and ranks second in the number of new cases and more than 90% of all cases in the Americas, was one of the countries with an increase in this number, with a heterogeneous distribution of cases due to the Social Determinants in Health (SDH), which are distinctive for each region (mainly underprivileged and vulnerable populations, with precarious housing and food conditions), and internal migration routes<sup>(3)</sup>.

Public policies aimed at leprosy in the country began in 1923 with Decree No. 16,300 and, since then, have evolved along with the treatment and epidemiological fluctuations of the disease. In the most current national strategy, the Ministry of Health (MH) outlines objectives aligned with global ones, aiming to eliminate the disease as a public health problem, especially concerning late diagnosis and its consequences, such as physical disabilities. Strengths and strategies mentioned in this document relate to support in terms of training for health professionals, evaluation of the methodologies used, incorporation of technological innovations, encouragement of conti-

nuing education, and strengthening of permanent education to face leprosy in the teaching-service integrated network<sup>(3)</sup>.

These actions align with epidemiological data released in recent years, which still point to cases diagnosed by passive detection, in which the individual seeks the health service or is referred to it when he presents any of the symptoms. This suggests fragility in disease control activities, so it is necessary to establish actions that favor the active search and engagement of professionals, increasing contact detection and surveillance activities, considered one of the more effective measures for the diagnosis and control of leprosy, contributing to the break of the chain of transmission of the disease<sup>(4)</sup>.

The Research and Action Group in Infectious Diseases of the State University of Londrina (GAPI/UEL in Portuguese), active in southern Brazil, has been developing studies on leprosy and, over the last few years, has identified important aspects including those mentioned above. In prior studies, the difficulty of access to diagnosis and treatment was demonstrated, and the specific evaluation found weaknesses in the performance of the Community Health Agents (CHA) concerning the attributes of Primary Health Care (PHC)<sup>(5-6)</sup>.

Other studies by the group showed a direct relationship between the disease and SDH, such as agglomeration of individuals in the same municipality, race/color, income, and education, in addition to a critical node regarding the time elapsed between the first symptoms and diagnosis, which can take from months up to decades, requiring, on average, 4.6 years and almost eight consultations, far from the recommended goals<sup>(7-8)</sup>. Concerning the importance of professional training explained above for the control and possible elimination of leprosy, this protocol aims to describe the systematization of a scoping review to answer the following question: What is the scientific evidence about the professional training of the members of the leprosy PHC team?

## METHOD

The PCC framework was used to establish the research question, as shown in Figure 1.

## Types of studies

Inclusion criteria will be original articles, case reports, final papers, monographs, theses, and dissertations not published in scientific journals and manuals, with access available free of charge or through an institutional subscription, in Portuguese, English, or Spanish, with no time restraint, and published until June 2021. The start date was not pre-fixed since leprosy is an old disease whose actions and publications can go back many decades. It is emphasized that the authors acknowledge search limitations, such as the recent emergence of some databases, indexing, and the popularization of scientific literature.

The exclusion criteria will be secondary studies, duplicates, selection notices, catalog sheets, reviews, letters, editorials, and studies written in a language different from those considered in the study.

# Methodology

The protocol was developed based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR) and on the Joanna Briggs Institute's (JBI) guidelines<sup>(9)</sup>, comprising five stages: (1) identification of the research question; (2) identification of relevant studies; (3)

Research question	What is the scientific evidence about the professional training of the members of		
	the leprosy PHC team?           The leprosy PHC team -a doctor, a nurse, nursing technicians, Community Health		
Population	Agents (CHA), and other health care workers.		
Concept	Training for health professionals on leprosy, a communicable and chronic disease caused by <i>Mycobacterium leprae</i> and characterized by loss of sensitivity and possible implications and disabilities <sup>(1)</sup> .		
Context	Actions carried out within the scope of PHC, focusing on the Family Health Strat egy and other PHC workers, including training, carried out in loco through work shops or remotely.		

**Figure 1 -** PCC framework applied to the scoping review. Londrina, PR, Brazil, 2022 Source: Prepared by the authors, 2022.

selection of studies; (4) extraction of data; and (5) collating and summarizing the results. The protocol was registered in the Open Science Framework (OSF) (https://osf.io/mt8fb/).

# Search strategy and information

The search strategy described below will be used, using the descriptors (DeCS and MeSH) and alternative terms combined with the Boolean operators AND and OR, according to the research question.

The search will be carried out through the Federated Academic Community (CAFe) of the University of Londrina Central Library to identify relevant materials using a standardized data collection. The following databases will be explored: Virtual Health Library (VHL), MEDLINE via National Library of Medicine National Institutes of Health (PubMed), CINAHL (Cumulative Index to Nursing and Allied Health Literature), Web of Science (WOS), Scopus (Scopus Preview), Latin American and Caribbean Health Sciences Literature (LILACS), Cochrane, Coordination for the Improvement of Higher Education Personnel (CAPES) Portal of theses and dissertations, Latin American Portal of theses, and World Cat Dissertations and Theses. Terms in Portuguese, Spanish, and English will be used. Descriptors in Portuguese and Spanish can be found in the Descriptors in Health Sciences (DECs), while those in English will be retrieved from the Medical Subject Headings (MeSH). The gray literature search for unindexed materials will be conducted through Google Scholar and the Gray Literature Report, as shown in Figure 2.

A preliminary search was conducted using the strategy above in the MEDLINE database, via PubMed, on May 19, 2022, to identify the number of materials meeting the study's inclusion criteria. At the time, 25,750 studies were found, which would be evaluated in terms of inclusion and exclusion criteria.

# Study selection, data extraction, and analysis

After searching for the materials in the selected databases through title and abstract screening, the selected studies will be exported from each database to Endnote version 9 for analysis. Subsequently, still at this stage, the StArt (State of the Art through Systematic Review) tool will be used, a literature review tool developed by the Software Engineering Research Lab of the Federal University of São Carlos<sup>(10)</sup>.

In this phase, using the StArt software, duplicates will be removed, and the remaining studies will undergo a title and abstract screening in the first phase and a full-text screening in the second phase. These procedures aim to identify the materials that meet the study's inclusion criteria. The StArt software uses a flow that includes the inclusion and exclusion criteria for sorting the articles and other materials. Peers will read the titles, abstracts, and full texts to guarantee the legitimacy of the review and avoid biases. In the event of disagreement between the two reviewers, a third researcher will be consulted.

After choosing the materials, a form built based on the research question and inclusion and exclusion criteria will be used to detail the information found (Figure 3). These steps will be indicated in the item referring to the research method.

#### **Data presentation**

A flowchart will be built with information related to extracted, duplicated, and excluded materials by title, abstract, and full-text screening, as well as the number of materials listed as relevant for the review and the final sample of the study.

Upon consensus of the researchers involved in the extraction and analysis of data, the results (materials that will be included in the review after reading the full text) will be presented through tables, graphs, flowcharts, or charts containing information on the authors, year of publication, location, objective, population, method, characteristics/modality of training, and main findings. The results will support a discussion that explores studies related to the professional training of the members of the leprosy PHC team and compares the most used methods for training by identifying possible strategies used, their strengths, and weaknesses.

### **CONFLICT OF INTEREST**

The authors have declared that there is no conflict of interest.

Databases used	Search strategy
- Virtual Health Library - CINAHL - LILACS - Latin American Portal of theses - Google Scholar	("equipe de assistência ao paciente" OR "patient care team" OR "equipe multiprofissional" OR "equipe de saúde" OR "enfermeiras e enfermeiros" OR "nurses" OR "médicos" OR "physicians" OR "assistentes de enfermagem" OR "nursing assistants" OR "auxiliares de enfermagem" OR "fisioterapeutas" OR "physical therapists" OR "agentes comunitários de saúde" OR "community health workers") AND ("capacitação profissional" OR "staff development" OR "formação profissional" OR "capacitação de recursos humanos em saúde" OR "formação profissional em saúde" OR "educação continuada" OR "education, continuing" OR "educação permanente" OR "educação" OR "education" OR "oficinas de trabalho" OR "programas de treinamento" OR "workshops" OR "prevenção de doenças" OR "preventive medicine" OR "preventive health services" OR "ações preventivas contra incapacidades" OR "hanseníase" OR "leprosy" OR "doença de Hansen" OR "lepra" OR "Mycobacterium leprae" OR "hanseníase paucibacilar" OR "leprosy, paucibacillary" OR "hanseníase indeterminada" OR "hanseníase multibacilar" OR "leprosy, multibacillary" OR "hanseníase dimorfa" OR "hanseníase virchowiana" OR "leprosy, lepromatous" OR "hanseníase cutânea" OR "hanseníase nodular") AND ("atenção primária à saúde" OR "primary health care" OR "saúde pública" OR "public health" OR "saúde coletiva" OR "saúde da família")
<ul> <li>MEDLINE via PubMed         <ul> <li>Web of Science</li> <li>Scopus</li> <li>Cochrane</li> <li>World Cat Dissertations and Theses</li> <li>Gray Literature Report</li> </ul> </li> </ul>	<ul> <li>("patient care team" OR "nurses" OR "physicians" OR "nursing assistants" OR "physical therapists" OR "community health workers") AND ("staff development" OR "education, continuing" OR "education" OR "workshops" OR "preventive medicine" OR "preventive health services" OR "leprosy" OR</li> <li>"Mycobacterium leprae" OR "leprosy, paucibacillary" OR "leprosy, multibacillary" OR "leprosy, borderline" OR "leprosy, tuberculoid" OR "leprosy, lepromatous") AND ("primary health care" OR "public health" OR "Family health")</li> </ul>
- CAPES Portal of theses and dissertations	("equipe de assistência ao paciente" OR "equipe multiprofissional" OR "equipe de saúde" OR "enfermeiras e enfermeiros" OR "médicos" OR "assistentes de enfermagem" OR "auxiliares de enfermagem" OR "fisioterapeutas" OR "agentes comunitários de saúde") AND ("capacitação profissional" OR "formação profissional" OR "capacitação de recursos humanos em saúde" OR "formação profissional em saúde" OR "educação continuada" OR "educação permanente" OR "educação" OR "oficinas de trabalho" OR "programas de treinamento" OR "workshops" OR "prevenção de doenças" OR "ações preventivas contra incapacidades" OR "hanseníase" OR "doença de Hansen" OR "lepra" OR " <i>Mycobacterium leprae</i> " OR "hanseníase paucibacilar" OR "hanseníase indeterminada" OR "hanseníase multibacilar" OR "hanseníase dimorfa" OR "hanseníase tuberculoide" OR "hanseníase virchowiana" OR "hanseníase cutânea" OR "hanseníase nodular") AND ("atenção primária à saúde" OR "saúde pública" OR "saúde coletiva" OR "equipe de saúde da família" OR "estratégia saúde da família")

**Figure 2** - Search strategy. Londrina, PR, Brazil, 2022 Source: Prepared by the authors, 2022.

Study identification									
Journal	Title	Authorship	Year	Country	Language	Objective			
Study characteristics									
Method	Sample	Strategy used		Main results	Conclusion (effectiveness of actions)				

**Figure 3** - Instrument for data collection. Londrina, PR, Brazil, 2022 Source: Prepared by the authors, 2022.

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