



Educational actions for prevention and control of tuberculosis: an experience report



Ações educativas para prevenção e controle da tuberculose: um relato de experiência

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Abstract

Tuberculosis is an infectious disease transmitted by the bacterium *Mycobacterium tuberculosis*, which mainly affects the lungs. This study reports the experience of medical students in developing and implementing actions to prevent and control tuberculosis in partnership with the School Health Program. This experience enabled students to understand the problems caused by the increased number of cases of tuberculosis in the community, essential to implement health education actions to prevent and control this disease. In this sense, students realized the importance of coordination between health teams and schools in the territory covered by basic health units to strengthen the fight against social vulnerabilities.

Keywords: Primary health care; Health education; Health promotion; Tuberculosis.

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Resumo

A tuberculose é uma doença infecciosa transmitida pela bactéria *Mycobacterium tuberculosis*, que acomete principalmente os pulmões. O estudo relata a experiência de estudantes de medicina na elaboração e execução de ações para prevenção e controle da tuberculose em parceria com o Programa Saúde na Escola. Essa vivência possibilitou aos estudantes a compreensão dos problemas ocasionados pelo aumento dos casos de tuberculose na comunidade, sendo imprescindível a realização de ações de educação em saúde com medidas de prevenção e controle dessa patologia. Dessa forma, os estudantes perceberam a importância da articulação entre equipes de saúde e escolas do território de abrangência das Unidades Básicas de Saúde, a fim de fortalecer o enfrentamento das vulnerabilidades sociais.

Palavras-chaves: Atenção Primária à Saúde; Educação em saúde; Promoção da saúde; Tuberculose.

INTRODUCTION

Tuberculosis (TB) is an infectious disease caused by the bacterium *Mycobacterium tuberculosis*, also known as Koch's bacillus. This disease affects mainly the lungs, but also involves other organs and systems. The extrapulmonary form of TB is frequent in people with HIV, especially those with compromised immune systems¹. In 2020, TB affected an average of 9.9 million people worldwide, resulting in 1.3 million deaths among those without HIV infection. Until 2019, TB was the leading cause of death from a single infectious agent, but it was surpassed by COVID-19 in 2020².

In Brazil, the diagnosis of TB is conducted according to the Guidelines for TB Control and subdivided into clinical, differential, bacteriological, imaging, histopathological, and other diagnostic tests. Laboratory diagnosis of TB is essential for detecting new cases and treatment control. Therefore, clinical evaluation is also important for TB diagnosis, while chest X-rays are recommended as complementary diagnosis³.

In this context, according to TABNET/DATASUS data^{4,5}, Olinda is the fifth most representative municipality in Pernambuco according to the number of cases of TB over the past 10 years. This indicates that the disease prevalence in the area is high and that many basic health units (BHU) face difficulties in controlling the emergence and spread of the infection.

This situation aligns with studies that demonstrated a slow decline of cases of TB and its variation according to the human development index, sociocultural aspects, political structure, organization of health services, and the continuity of National Tuberculosis Control Programs. Studies also indicated that the northeast region presented one of the highest infection and mortality rates from the disease despite the greater primary health care (PHC)⁶ coverage.

Besides individual care, PHC must develop community strategies integrated with health surveillance actions. This collaboration helps health professionals recognize the particularities of the territory, the determinants and conditions of individual and collective health, health risk situations, and the local context of the areas covered by family health and primary care teams to improve their effectiveness in combating and controlling TB².

Considering the diverse work processes and life contexts of populations at higher risk of illness within each territory, it is essential to direct actions that contribute to the planning of strategies for health promotion, protection, prevention, and control of risks, harms, and diseases. These strategies can be implemented in partnership with the School Health Program (SHP)^{2,7}.

The SHP aims to permanently integrate and coordinate education and health to improve the quality of life for the Brazilian population. This program also contributes to student development via actions of health promotion, prevention, and care; thus, addressing the vulnerabilities that compromise the development of children and adolescents in the public education system⁷.

The guidelines that lead this program especially aim for social control, integration and coordination of health and public education systems, interdisciplinarity, and intersectorality. This is achieved by integrating knowledge and social participation and expanding actions and knowledge exchange between different professions, aiming at a comprehensive health care for children^{7,8}.

In this context and based on local epidemiological data, the need for coordination between family health teams and schools within the BHU territory is evident. Based on this proposal, the use of new teaching and learning tools may facilitate addressing health vulnerabilities, enabling school development, respecting local realities, and improving the autonomy of children, parents, the school community, and society^{8,9}.

Therefore, the monitoring and follow-up of cases of TB are part of PHC actions, which, along with the detection of the disease, diagnosis, and treatment, constitute part of the comprehensive and longitudinal care for people with TB and their families. This study aimed to describe the experience of medical students in developing and implementing TB prevention actions in partnership with the SHP.

METHODS

This descriptive and narrative study was conducted according to the problem-based methodology and using the five stages represented in the Maguerez Arch¹⁰. This methodology allowed students to develop activities according to the reality in which they were inserted, providing the planning of interventions to minimize the problem.

The activities were proposed during theoretical-practical sessions at a BHU in a municipality of the metropolitan region of Recife, Pernambuco. During this experience, students identified increased cases of TB within the BHU territory.

After monitoring and recognizing the notified cases of TB, students had the opportunity to plan activities to be developed in collaboration with the family health teams. During the planning phase, interventions were conducted in partnership with the SHP, involving the municipal school located within the BHU territory, as some children had been diagnosed with TB. The actions were conducted at an elementary school with an average of 100 children.

EXPERIENCE REPORT

The experience at the BHU allowed students to understand the problems caused by the increase in cases of TB and the presence of cases among children enrolled in the school located within the BHU territory.

Therefore, meetings were held between the health team, students, and school professionals to plan actions focused on this topic and establish a partnership with the SHP.

The main idea was to provide health education actions for children, school professionals, parents, and guardians using self-explanatory materials and activities involving TB prevention and control measures.

Activities were conducted in groups using interactive presentations on the topic (banners and leaflets prepared by the students) that covered signs and symptoms, prevention measures, and disease control. One strategy used with children was the demonstration of the correct handwashing technique. Afterward, children had the opportunity to practice with guidance and assistance of students.

Considering that handwashing is a simple preventive measure against various infectious diseases, children should be encouraged to practice it as a strategy for disease prevention and health promotion^{11,12}.

The school is a space for learning, knowledge construction, and personal growth that has an important role in promoting health education. Health promotion in schools involves not only children but also professionals and the community^{11,12}.

FINAL CONSIDERATIONS

Implementing actions for TB prevention via SHP was important for the community assisted by the BHU. These actions allowed the dissemination of important information about TB prevention and control measures, directly contributing to reducing new cases.

Therefore, students experienced the importance of coordination between health teams and schools within the BHU territory, considering that the proposed actions should be based on a participatory pedagogical practice with a transformative health education approach, which facilitates addressing social vulnerabilities.

CONFLICT OF INTEREST

Nothing to declare.

AUTHOR CONTRIBUTION

FSRB: Conceptualization; Methodology; Resources; Supervision; Validation; Visualization; Writing – original draft and Writing – review and editing. **ELAG, SPSA, and FGCM:** Resources; Visualization. **CGI:** Conceptualization; Methodology; Resources; Visualization; Writing – original draft and Writing – review and editing.

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