Health education as a tuberculosis prevention strategy among international migrants: an experience report

Educação em saúde como estratégia de prevenção da tuberculose entre migrantes internacionais: relato de experiência

Educación en salud para la prevención de la tuberculosis en migrantes internacionales: relato de experiencia.

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RESUMO

Objetivo: Relatar a experiência de um profissional de saúde que realizou ação de educação em saúde, com abordagem preventiva sobre tuberculose, voltada a migrantes internacionais, que residiam na cidade de Foz do Iguaçu no Paraná. **Método**: Relato de experiência vinculado a projeto de pesquisa pragmática de pós-graduação em saúde pública. As atividades ocorreram entre agosto e outubro de 2024, incluindo palestras dialogadas, reuniões com associações de migrantes, busca ativa e distribuição de materiais educativos. Participaram 43 migrantes de diferentes nacionalidades, majoritariamente estudantes universitários. **Resultados**: As abordagens com linguagem acessível favoreceram o diálogo, o esclarecimento de dúvidas e a compreensão sobre sinais, sintomas, prevenção e orientações para busca de atendimento nos serviços de saúde. Observou-se boa adesão, especialmente entre a comunidade haitiana, além do fortalecimento do vínculo entre profissionais de saúde, instituições acadêmicas e organizações de migrantes. **Conclusão**: A educação em saúde, quando realizada de forma dialógica e culturalmente sensível, constitui estratégia fundamental para a prevenção da tuberculose e para a promoção do acesso aos serviços de saúde entre migrantes em contextos de fronteira

Descritores: Tuberculose; Migrantes internacionais; Educação em saúde; Região de fronteira; Saúde pública.

ABSTRACT

Objective: To report the experience of a health professional who carried out a health education activity, with a preventive approach to tuberculosis, aimed at international migrants residing in the city of Foz do Iguaçu in Paraná. Method: Experience report linked to a pragmatic research project of postgraduate studies in public health. Activities took place between August and October 2024, including dialogic lectures, meetings with migrant associations, active outreach, and distribution of educational materials. A total of 43 migrants of different nationalities participated, mostly university students. **Results**: The approaches prioritized accessible language, fostering dialogue, clarification of doubts, and understanding of signs, symptoms, prevention, and guidance on seeking healthcare services. Good adherence was observed, especially among the Haitian community, as well as strengthening of bonds between health professionals, academic institutions, and migrant organizations. **Conclusion:** Health education, when carried out in a dialogical and culturally sensitive manner, constitutes a fundamental strategy for tuberculosis prevention and for promoting access to health services among migrants in border contexts.

Descriptors: Tuberculosis; International migrants; Health education; Border region; Public health.

RESUMEN

Objetivo: Informar sobre la experiencia de un profesional de la salud que realizó una actividad de educación para la salud, con enfoque preventivo de la tuberculosis, dirigida a migrantes internacionales residentes en la ciudad de Foz do Iguaçu, Paraná. Método: Informe de experiencia vinculado a un proyecto de investigación pragmática de estudios de posgrado en salud pública. Las actividades se realizaron entre agosto y octubre de 2024, incluyendo charlas dialogadas, reuniones con asociaciones de migrantes, búsqueda activa y distribución de materiales educativos. Participaron 43 migrantes de diferentes nacionalidades, mayoritariamente estudiantes universitarios. **Resultados:** Los abordajes con lenguaje accesible favorecieron el diálogo, la aclaración de dudas y la comprensión de signos, síntomas, prevención y orientaciones para buscar atención en los servicios de salud. Se observó buena adhesión, especialmente entre la comunidad haitiana, además del fortalecimiento del vínculo entre profesionales de salud, instituciones académicas y organizaciones de migrantes. **Conclusión:** La educación en salud, cuando se realiza de forma dialógica y culturalmente sensible, constituye una estrategia fundamental para la prevención de la tuberculosis y la promoción del acceso a los servicios de salud entre migrantes en contextos de frontera.

Descriptores: Tuberculosis; Migrantes internacionales; Educación en salud; Región de frontera; Salud pública.

ACCOUNT OF AN EXPERIECE

Introduction

Tuberculosis (TB) remains one of the major global public health challenges, ranking among the ten leading causes of death worldwide and the second leading cause of death from infectious diseases, surpassed only by COVID-19[1]. It is estimated that, in 2021, approximately 10.6 million people developed the disease, representing a 4.5% increase compared with the previous year, a direct consequence of disruptions in diagnostic and treatment services during the COVID-19 pandemic[1]. The situation is further aggravated by the fact that approximately one quarter of the world's population has latent Mycobacterium tuberculosis infection (LTBI), an asymptomatic condition that carries a 5% to 10% lifetime risk of progression to active tuberculosis[2].

Among the groups most vulnerable to TB infection and disease are international migrants, refugees, and stateless persons (MRS). These populations frequently face precarious housing conditions, inadequate nutrition, linguistic and cultural barriers, as well as difficulties in accessing healthcare services, factors that significantly increase the risk of exposure to the bacillus and progression to active forms of the disease[3]. Studies conducted in Brazil demonstrate that the prevalence of LTBI among migrants in Brazilian state capitals ranges from 23.5% to 46.1%, with a higher incidence of active TB in the North, South, and Southeast regions[4,5]. Migrants are 5 to 6 times more likely to develop TB compared with the general population, with the most critical period being the first 2 to 5 years after arrival in the destination country[6].

In addition to biological and epidemiological factors, the migration process is associated with social determinants that directly influence the health of these populations. The literature indicates that migrants frequently reside in precarious residential areas with limited access to essential services such as sanitation, education, and healthcare, which increases the transmission of infectious diseases and hinders timely access to diagnosis and treatment[3,6].

In the Brazilian context, border regions, such as the triple border between Brazil, Paraguay, and Argentina, present unique characteristics that amplify these challenges, including the high circulation of people, cultural diversity, and asymmetry in the availability of healthcare services among neighboring countries.

In this scenario, the World Health Organization (WHO) and the Pan American Health Organization (PAHO) recommend the implementation of educational actions as an integral part of TB control strategies, since health education has demonstrated a positive impact on treatment adherence, reduction of treatment abandonment, and mitigation of the stigma associated with the disease[7].

Thus, health education, when based on dialogue and active listening, enables healthcare professionals to understand the perceptions, beliefs, and practices of communities, facilitating the joint development of prevention and care strategies that respect the cultural specificities of the populations served. In Brazil, health education for vulnerable populations is supported by public policies such as the National Primary Care Policy and the National Health Promotion Policy, which guide the adoption of dialogical and culturally sensitive approaches[8].

Given this context, the present study aims to report the experience of a healthcare professional in conducting preventive educational actions on tuberculosis directed at international migrants residing in Foz do Iguaçu, Paraná, an international triple-border region, with the purpose of contributing to the development of more effective and inclusive public health strategies for this population.

Methodology

This is an experience report on educational health actions, based on the methodological framework proposed by Mussi, Flores, and Almeida (2021), which establishes guidelines for the systematization of experience reports as a means of producing scientific knowledge[9]. This framework guides the detailed description of the context, the individuals involved, the activities performed, the results achieved, and critical reflections on the experience, allowing the transformation of experience into knowledge that can be shared and applied in other contexts[9].

The activity was carried out in the city of Foz do Iguaçu, located at the triple border between Brazil, Paraguay, and Argentina, a region characterized by intense migratory flow and cultural diversity.

According to the Migracidades report, in 2021 the municipality registered 16,954 migrants with permanent residence, while in 2024 approximately 289,820 people moved through the territory of Foz do Iguaçu, highlighting the magnitude of the local migration phenomenon[10,11]. These figures indicate that the migrant population in Foz do Iguaçu is not limited to permanent residents but also includes a significant contingent of cross-border migrants who travel daily among the three countries for work, study, trade, and access to healthcare services, thereby increasing the complexity of healthcare delivery and the need for public health strategies adapted to this reality.

The target population consisted of two main groups: (1) students from the Federal University for Latin American Integration (UNILA), a higher education institution with a strong regional and intercultural vocation that receives students from across Latin America and the Caribbean; and (2) migrants residing and working in the city, living in communities near the university or in areas with a higher concentration of foreign nationals.

A total of 43 migrants of different nationalities participated, including Haitians, Venezuelans, Peruvians, Paraguayans, Ecuadorians, and Argentinians. Most participants were young adults, aged between 18 and 35 years, and had lived in the city for less than five years, a period considered critical for the development of active tuberculosis among migrant populations.

The actions were carried out between August and October 2024 and were planned in four sequential stages: (1) awareness-raising and participant recruitment through contact with community leaders and migrant associations; (2) delivery of dialogic lectures in community and institutional settings, using accessible language and encouraging active participation by migrants; (3) distribution of printed educational materials (leaflets and posters) containing information on signs, symptoms, prevention, and guidance on seeking healthcare services; and (4) referral of participants with suspected clinical signs to primary healthcare services.

The lectures were conducted in Portuguese using slow, clear language and supported by visual resources and practical examples to facilitate understanding. During all meetings, priority was given to open dialogue, active listening, and the exchange of experiences among participants, providing opportunities for questions and clarification at any time. This dialogical approach was fundamental in overcoming linguistic and cultural barriers, as well as creating an environment of trust and welcoming. In addition, printed educational materials in Portuguese, with illustrations and simple language, were produced, and a QR code was made available to provide access to complementary information on tuberculosis and the available healthcare services.

The activities were carried out in partnership with two migrant associations: the Association of Migrants, Indigenous Peoples and Refugees of Foz do Iguaçu (AMIRF) and the Association des Jeunes Haitiens en Sciences de la Santé (AJHASS). These partnerships were strategic for gaining access to the migrants' places of residence and social interaction, as well as for establishing trust between the researchers and the community.

As this was an experience report on the dissemination of knowledge, ethical review was not required, in accordance with Brazilian National Health Council Resolutions 466/2012 and 510/2016, which establish that community-based extension and health education activities do not require submission to a Research Ethics Committee. Nevertheless, all participants were informed about the objectives of the activities, and their voluntary participation was ensured.

Results

A total of 43 migrants participated in the activities, distributed across three meetings, with distinct participant profiles at each occasion. The topics addressed included the definition of tuberculosis, the distinction between latent tuberculosis infection (LTBI) and active tuberculosis disease (TBD), the main symptoms, modes of transmission, risk factors, and the recommended procedures when clinical suspicion is present.

Throughout the activities, participants demonstrated interest and engagement by asking questions about prevention, treatment, and access to healthcare services. No participants presenting respiratory symptoms suggestive of active TB were identified. Greater participation was observed among the Haitian community, which attended in larger numbers and actively engaged in the discussions, possibly due to its strong community organization and the presence of specific associations.

Table I presents the detailed schedule of the activities carried out, including the respective dates, duration, description of the actions, and the results achieved..

Table I – Schedule of activities carried out with international migrants. Foz do Iguaçu, 2024.

Date and Activity Performed	Results Achieved and Perceptions
10/08/24 - Planning	During a meeting, the project theme was selected: raising awareness among international migrants, refugees, and stateless persons (MRS) about TB, as well as the topics to be addressed during the meetings.
16/08/24 - Meeting with the president of AMIRF	During this meeting, topics related to the origin of AMIRF, the reality of the association, the activities it carries out, the number of members, the number of nationalities it serves, and its role in society were discussed.
05/09/24 - Following the meeting with the AMIRF representative, the initial planning was reviewed with the supervisor for the development of leaflets and posters on tuberculosis.	During this team meeting, we discussed and prepared leaflets and posters on tuberculosis. Subsequently, 100 leaflets and 50 posters were produced and used during the activity.
08/09/24 and 14/09/24 - Active case finding, participant recruitment, and educational action with a group of migrants. Health education activity.	A lecture on tuberculosis was delivered to a group of migrants of different nationalities, including UNILA students and some of their family members. Participants received guidance on the signs and symptoms of tuberculosis, were informed that migrants constitute a vulnerable group, and were instructed to seek medical care at the nearest healthcare unit if they presented any symptoms.

26/09/24 - Meeting with the physician of the Association des Jeunes Haitiens en Sciences de la Santé (AJHASS), responsible for the association's health activities.	During this meeting, the AJHASS representative explained how the association's health activities are organized. Details were aligned to enable the future implementation of a joint educational activity to present the project to the association's members.
26/10/24 - Educational action and active case finding with students at the UNILA student residence.	During this meeting, a lecture on migrant health, including tuberculosis, was delivered. Guidance was provided on the main symptoms and on what participants should do if they developed them.

Discussion

The educational activities reached 43 migrants from different nationalities, highlighting the complexity and cultural diversity present in Foz do Iguaçu. Although the number of participants may appear modest, the multiplicity of origins and the heterogeneity of the group reflect the barriers to healthcare access that characterize border regions, where linguistic, cultural, and documentation-related factors frequently hinder the search for healthcare[12].

Previous studies have shown that migrant populations face significant challenges in accessing healthcare services, including discrimination, lack of knowledge about their rights, and a shortage of professionals trained in intercultural care[13]. In this regard, the implementation of educational activities in community and institutional settings, using a dialogical and culturally sensitive approach, represents an important strategy for overcoming these barriers and promoting access to information and healthcare.

Screening and active case finding among migrants are consistent with the recommendations of the Brazilian Ministry of Health, which considers immigrants a priority group for tuberculosis investigation, and recommends that cough should be investigated regardless of its duration[2]. However, the absence of a specific national plan for LTBI screening among migrants and refugees represents an important gap, hindering early detection and preventive treatment[6].

The international literature indicates that the implementation of screening programs targeted at mobile populations is cost-effective and reduces community transmission, especially in regions with high migratory flow[14]. In this context, the reported experience highlights the need to expand active case-finding strategies and strengthen the integration between healthcare services and migrant communities, emphasizing health education as a tool for empowerment and the promotion of autonomy.

The dialogical approach adopted, based on open dialogue and accessible language, proved effective in promoting understanding and reducing stigma, in accordance with PAHO recommendations, which advocate communication as a central tool in TB care[7]. This perspective is supported by Paulo Freire's critical pedagogy, which criticizes "banking education" and advocates the individual's active role in the learning process and social transformation[15]. The use of printed educational materials and a QR code as informational reinforcement contributed to knowledge retention and expanded access to information, strategies that have been recommended in contexts of low health literacy[16]. The greater participation of Haitian migrants may be explained by the large Haitian community in the region and the cumulative 389% increase in migration records in the state of Paraná between 2020 and 2025, with Haitians leading the applications for naturalization[17]. Factors such as the economic crisis in Haiti, natural disasters, and the humanitarian visa agreements established with Brazil since 2012 have contributed to this migratory flow[18,19].

UNILA, due to its Latin American and intercultural vocation, constitutes a strategic setting for the implementation of health actions, promoting regional integration and access to information[20]. The partnership with associations such as AMIRF and AJHASS was fundamental for strengthening ties with the community and expanding the reach of the activities, demonstrating that health education, when conducted in a dialogical and culturally sensitive manner, can contribute significantly to tuberculosis prevention in border settings.

Conclusion

The reported experience demonstrates that health education, based on dialogue, accessible language, and respect for the cultural specificities of migrants, is a powerful tool for tuberculosis prevention in border regions. The activities carried out enabled not only the dissemination of information about the disease but also the strengthening of ties among healthcare professionals, academic institutions, and civil society organizations, expanding access to information and healthcare.

A limitation of this experience is that the activities were concentrated in a single city and among specific groups (predominantly students), which limits the generalizability of the findings. Nevertheless, the results may support future interventions in similar contexts. The continuity of educational actions integrated into public health policies is recommended, as well as the development of studies evaluating the impact of these interventions on the early detection of tuberculosis and treatment adherence among migrants.

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