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Competency mapping of primary healthcare nurses on the Brazil-Paraguay border

Mapeamento de competências de enfermeiros da atenção primária de saúde na fronteira Brasil-Paraquai

Mapeo de competencias de los enfermeros de atención primaria de salud em la frontera Brasil-Paraguay

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ABSTRACT

Objective: To map the competencies of Primary Health Care nurses in border regions of Brazil and Paraguay.

Method:Exploratory qualitative studyconducted between February and July 2020, with 64 nurses from six Brazilian municipalities bordering Paraguay. It was conducted in three stages: 1. Documentary study: analysis of legal documents to identify the nurse's competencies. 2. Application of instrument to the study population .3. Mapping of competencies, through the competencies expressed by nurses analyzed using the collective subject discourse technique.

Results: Twenty-eight general competencies were identified, categorized as assistance and management, and five specific competencies required to work in border regions: conducting a situational diagnosis of the border community, attending to foreign users with active and humanized listening; communicating appropriately with foreign users; identifying the epidemiological profile of the border; and, understanding the health policies of the neighboring country. The competencies required for the work from the participants' perspective were included in the mapping. The competence gap identified in the mapping refers to educational practices in communities.

Final considerations: The study identified the necessary competencies for nurses to work in border regions, but pointed out gaps in the training and continuing education of these professionals.

Descriptors: Primary health care. Professional competence. Nursing. Border health. Culturally competent care.

RESUMO

Objetivo: Mapear as competências dos enfermeiros da Atenção Primária à Saúde em regiões fronteiriças do Brasil e Paraguai.

Método: Estudo exploratório de natureza qualitativa realizado entre fevereiro e julho de 2020, com 64 enfermeiros de seis municípios brasileiros fronteiriços com o Paraguai. Foi realizada em três etapas: 1. Estudo documental: análise de documentos legais para identificar as competências do enfermeiro. 2. Aplicação de instrumento para a população do estudo.3. Mapeamento das competências, através das competências expressas pelos enfermeiros analisados pela técnica do discurso do sujeito coletivo.

Resultados: Identificaram-se 28 competências gerais, categorizadas como assistenciais e gerenciais e cinco competências específicas requeridas atuar para regiões de fronteira: realizar o diagnóstico situacional da comunidade fronteiriça; atender o usuário estrangeiro com escuta ativa e humanizada; comunicar-se de forma adequada com o usuário estrangeiro; identificar o perfil epidemiológico da fronteira; e, conhecer as políticas de saúde do país vizinho. As competências requeridas para o trabalho na perspectiva dos participantes, foram contempladas no mapeamento. A lacuna de competência identificada no mapeamento se refere às práticas educativas nas comunidades. **Considerações finais:** O estudo identificou as competências necessárias para enfermeiros atuarem em região de fronteira, mas apontoulacunas na formação e educação permanente desses profissionais.

Descritores: Atenção primária à saúde. Competência profissional. Enfermagem. Saúde na fronteira. Assistência à saúde culturalmente competente.

RESUMEN

Objetivo: Mapear las competencias de enfermeros de Atención Primaria de Salud en regiones fronterizas de Brasil y Paraguay. **Método:** investigación exploratoria descriptiva con enfoque cualitativo realizada entre febrero y julio de 2020, con 64 enfermeros de seis municipios brasileños fronterizos con Paraguay. Se realizó en tres etapas: 1. Estudio documental: análisis de documentos legales para identificar las competencias del enfermero. 2. Aplicación del instrumento a la población de estudio .3. Mapeo de competencias, a través de las competencias expresadas por enfermeros analizadas mediante la técnica del discurso del sujeto colectivo.

Resultados: Se identificaron 28 competencias generales categorizadas en asistencia y gestión, y cinco competencias específicas requeridas para trabajar en regiones fronterizas: realizar un diagnóstico situacional de la comunidad fronteriza; atender a los usuarios extranjeros con una escucha activa y humanizada; comunicarse adecuadamente con el usuario extranjero; entender el perfil epidemiológico de la frontera; y, conocer las políticas sanitarias del país vecino. En el mapeo se incluyeron las habilidades requeridas para el trabajo desde la perspectiva de los participantes. La brecha de competencias identificada en el mapeo se refiere a las prácticas educativas en las comunidades.

Consideraciones finales: El estudio identificó las habilidades necesarias para que las enfermeras trabajen en regiones fronterizas, pero señaló brechas en la formación y educación continua de estos profesionales.

Descriptores: Atención primaria de salud. Competencia profesional. Enfermería. Salud fronteriza. Atención sanitaria culturalmente competente.

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■ INTRODUCTION

Since the emergence of the Unified Health System (*Sistema* Único *de Saúde* – SUS), the professional identity of nurses in Brazil has undergone several changes, which favored the amplification of nursing competencies throughout the field of care, especially Primary Health Care (PHC)⁽¹⁾. This environment requires nurses to have several competencies to practice of care, such as coordination and maintaining information systems, technical responsibility for the unit, managing the ombudsman and health programs, and actions to control material and financial resources⁽²⁾.

Such competencies brought a new meaning to the work of nurses in the Americas region. Particularly in other Latin American countries, the managerial and care responsibilities of this professional have been questioned at all levels of health care, while in Brazil, the PHC service network, which represents the initial process of SUS care, has been strengthened and continues to be represented by the nursing workforce⁽³⁾.

New trends have increased nursing actions in the context of preventive care in communities, resulting in greater debate about professional practice and nurse leadership in care management across the country⁽⁴⁾.

In border regions, nurses experience singularities that require specific knowledge and skills, given the demand for care from populations considered floating. In other words, there is a daily flow of people who seek Brazil for the best health care conditions. Since these groups maintain their residences in their home country and do not cross the border with the intention of settling in Brazil, they are not considered migrants⁽⁵⁾.

Nurses in the role of care managers in PHC need to develop competencies to achieve humanized health care for border users, in line with the principles of equity and universality of the SUS⁽⁶⁾. The implementation of public policies in practical action to meet these demands and the services provided present weaknesses, as this population is not included in the municipal budget, which hampers all financial planning and collective health strategies in border regions⁽⁷⁾.

Recently, there has been progress in serving the migrant population, through Federal Law No.13,445 of 2017, also known as the Migration Law, which established a new legal framework for serving this population in Brazil. The old Foreigners Law of 1980 was repealed, and the Migration Law brought a more humanitarian and inclusive approach towards migrants, refugees and stateless people. Although this change has enabled the right to assistance in the SUS for

users with a temporary Brazilian visa, the demands for care from the border population have not yet been addressed⁽⁸⁾.

Another specificity of the borders is related to Paraguayan and/or Brazilian pregnant women living in Paraguay who seek SUS services for maternal and child care. In a study conducted during the COVID-19 pandemic in cities on the border between Brazil and Paraguay, found significant setbacks in prenatal care for this public, such as the suspension of groups of pregnant women, with losses in health education, postponement of the beginning of prenatal care and/or compromising its provision⁽⁹⁾.

The focus of another study conducted in the Brazilian triple border region, in Foz do Iguaçu, Paraná, was on patients who reside in Paraguay and need to cross the border daily for hemodialysis treatment in Brazil. This study indicated that the lack of government guidance makes the care bureaucratic, leaves the population dissatisfied, and weakens the relationship between these SUS users and healthcare professionals, who feel unprepared to provide quality PHC to border groups⁽¹⁰⁾. Assistance to users is influenced by this context of uncertainty and lack of government support, which results in less resolution in the management of underlying diseases, late start of follow-up and advanced stage of chronic kidney disease⁽⁵⁾.

The precariousness of public policies and international agreements create barriers to sharing of information, patient transport and cooperation between healthcare systems. Consequently, the planning and organization of care in PHC in these areas also suffer interference, which ends up reflecting on the work of professionals, such as nurses, who are faced with many gaps in providing humanized and comprehensive care to these populations⁽¹¹⁾.

The dissimilarity in the planning of public health systems in each border country is another determining factor, as in the case of Brazil and Paraguay, which geographically have numerous border communities, from large urban areas to deserts and border regions with free flow of people, thus establishing a differentiated and complex territorial organization⁽¹²⁾.

Such discrepancies are represented by gaps that guide the development of required competencies, and can also identify and propose competencies developed at work, but not cited by the organization⁽¹³⁾. In view of the above, the following guiding question for this research is presented: What are the required and expressed competencies for nurses' performance in PHC in border regions?

Given the complexity of the Brazilian border scenario, it is necessary to identify the knowledge, skills and attitudes

required for the work of nursing professionals. Therefore, the objective of this research is to map the competencies of Primary Health Care nurses in border regions of Brazil and Paraguay.

■ METHOD

An exploratory qualitative study conducted in six Brazilian cities located on the border with Paraguay, with the participation of nurses working in PHC, comprising three stages:

Stage 1 – Documentary study using the methodological framework proposed for content analysis⁽¹⁴⁾ with the objective defined, searches were conducted on government websites for thorough analysis of the contents and, subsequently, reading and interpretation of the texts that pointed out the competencies expected for the position of nurse in PHC, thus allowing identification and categorization for later discussion of themes.

The websites of the Ministry of Health and the Federal Nursing Council were consulted. The regulation of Ordinance No.2,436, of September 21, 2017 of the National Primary Care Policy (*Política Nacional de Atenção Básica* – PNAB))⁽¹⁵⁾ and the Professional Practice Law No.7,498/1986, Article 11 met the criteria, as both documents outline the attributions for nurses' work in PHC across the national territory, allowing recognition of the competencies expected of these professionals⁽¹⁶⁾.

Stage 2 – Data collection with PHC nurses: all nurses working in PHC in border municipalities were invited. The total number of these professionals was provided by the Municipal Health Departments (*Secretarias Municipais de Saúde* – SMS) of each city, and 139 nurses participated, distributed among the six cities in the research field, as shown in Chart 1.

For the composition of the group of nurses, the inclusion criterion was to work in the PHC network of the research cities and respond to an electronic instrument after the sending of three emails requesting participation. Nurses on leave or with a medical certificate, unable to participate during the data collection period, were excluded. Based on these criteria, all 139 nurses who worked in PHC were invited, but 61 did not respond to the invitation to participate.

Initially, the research had 78 nurses who agreed to read and learn about the project, but five of them did not agree to participate in the research, therefore, 73 responded to the questionnaire. As nine participants were excluded for not fully responding to the questions, the group researched was 64 nurses working in PHC in border cities of Brazil and Paraguay.

Participant recruitment was conducted through a Brazilian researcher and those responsible for the municipal health departments in the border cities. The municipalities selected to participate in this research were chosen for being considered border cities and located on the border between Brazil and Paraguay⁽⁸⁾. Six regions were selected: Foz do Iguaçu and

Chart 1 – Distribution of nurses considering the number of Primary Health Care units per border municipality. Foz do Iguaçu, Paraná, Brazil, 2020

Border cities	Number of health units	Number of nurses
Bela Vista – Mato Grosso do Sul	10	09
Coronel Sapucaia – Mato Grosso do Sul	3	13
Paranhos – Mato Grosso do Sul	06	08
Ponta Porã – Mato Grosso do Sul	14	20
Foz do Iguaçu – Paraná	24	53
Guaíra – Paraná	8	22
Total	65	139

Source: E-gestor Atenção Básica e do Cadastro Nacional de Estabelecimentos de Saúde Database, 2020.

Guaíra in the state of Paraná, Ponta Porã, Paranhos, Bela Vista and Coronel Sapucaia in the state of Mato Grosso do Sul.

The application of the semi-structured online instrument was carried out between March and July 2020, using the Survey Monkey electronic platform, based on an invitation to participate in the research via institutional emails provided by the municipal health departments, with explanations about the study and its objectives, followed by the Informed Consent Form (ICF)⁽¹⁷⁾. Three contact attempts were made, with intervals of five days.

The electronic instrument was accessed only by the participant, after clicking on the acceptance to participate in the research. The first part focused on understanding the nurse's profile with professional and demographic aspects (gender, age, time since graduation, professional improvement, municipality of practice and time working in PHC). Next, two questions are presented regarding daily work in PHC in border cities: 1. Describe the activities performed on a typical day of work in professional practice in PHC; 2. In your opinion, what competencies do you believe are specific for nurses working in PHC in a border region, describe how they are performed. The estimated response time for participants was 72 hours.

The material collected from the instruments was exported to a Microsoft Excel spreadsheet in text format for better organization and identification of responses. The material was analyzed using the Collective Subject Discourse (CSD) technique and supported by the Quanti Qualisoftware software.

For the construction of the CSDs, the phases suggested by the authors who proposed the LEFREVE and LEFREVE techniques were used: 1st Analysis and identification of key expressions (KE), that is, fragments taken from the responses that synthesized the statements and ideas; 2nd Identification of Central Ideas (CIs) after highlighting the key expressions. These were unified by similarity, categorizing each group of ideas; the 3rd moment consisted of preparing the CSD⁽¹⁸⁾ with the KEs found.

Stage 3: mapping of competencies expressed in professional practice in PHC, from the perspective of nurses participating in the research. Analysis of the competencies expressed by nurses based on the material collected in the instrument application and the competencies identified as required for practice in PHC found in the documents, PNAB and Professional Practice Law from the documentary research stage. Thus, it was possible to identify competency gaps in order to align the competencies needed to perform the service, while the mapping allows guiding the competency gaps and actions that are carried out beyond what is expected by the organization⁽¹³⁾.

The research was approved by the Research Ethics Committee of a Brazilian university in the southern border region of Brazil with opinion No. 20578619,4,0000,0107. Nurses were assured of the secrecy and confidentiality of the information provided through the Informed Consent Form. Each nurse was identified by the acronym (NUR) and numbering (NUR 1 to NUR 64).

RESULTS

In the first stage, documentary research, the latest 2017 review of the PNAB was used, which allowed us to list the set of competencies required for nurses to work: Health care for families; Nursing Consultation; Welcoming with active and qualified listening for risk classification; Risk stratification and development of care plans for people who have chronic conditions in the territory; Group activities and referral to networks; Monitoring and auditing the actions of nursing technicians/assistants and Community Health Agents (CHA); Implementation of routines, protocols and flows related to their area of competence in PHC⁽¹⁶⁾.

The analysis of the Professional Practice Law No.7,498/1986, in its Article 11, points out the nurses' exclusive competencies considered for work in PHC: Planning, organization, coordination and nursing direction; Prevention and systematic control of hospital infections and communicable diseases in general; Nursing consultancy and auditing; Execution and evaluation of health programs; Provision and evaluation of nursing care for human beings throughout their life cycles⁽¹⁵⁾.

In the first part of the online instrument, the questions asked to nurses were related to the professional profile for participant characterization: gender, age group, highest degree, area of specialization, form of employment for the position, length of service, and border city of residence, as shown in Table 1.

Following the instrument, the 64 nurses discussed their professional practices in PHC in a border region and this material was analyzed using the CSD technique⁽¹⁸⁾.

Figure 1 presents the eight Cls that emerged from the analysis of the material collected through the application of the questionnaire, the competencies expressed in the work from the participants' perspective:

In the question about the activities typically developed in professional practice in PHC in the context of border regions, among the 64 nurses, 49 pointed out the actions expected by the current regulatory bodies, according to the following statement:

Table 1 – Characterization of nurses who participated in the research. Foz do Iguaçu, Paraná, Brazil, 2020

Gender	N (%)
Female	57 (89.1)
Age	
21 to 29 years old	7 (26.6)
30 to 39 years old	1 (48.4)
40 to 49 years old	2 (18.7)
50 to 59 years old	4 (6.2)
60 years and over	-
Highest degree in the area	
Bachelor's degree	4 (7.8)
Bachelor's and teaching degree	10 (12.5)
Specialization	43 (70.3)
Master's degree	6 (7.8)
Form of employment	
Public contest	3 (82.2)
Employment contract	1 (17.8)

Source: Data collected by researchers, 2020.

Notes: — Numeric data not resulting from rounding.

CI1Q1:[...] Monitoring Prenatal care for pregnant women in the community attended by the Family Health team, many of these women are Paraguayans or Brazilian residents in Paraguay. They present residency documents in Brazil and receive assistance. (NUR. 14)

CI2Q1: [...] As a nurse, I have to be able to manage and plan all the activities of nursing staff and Community Health Agents/Endemic Diseases. (NUR. 22)

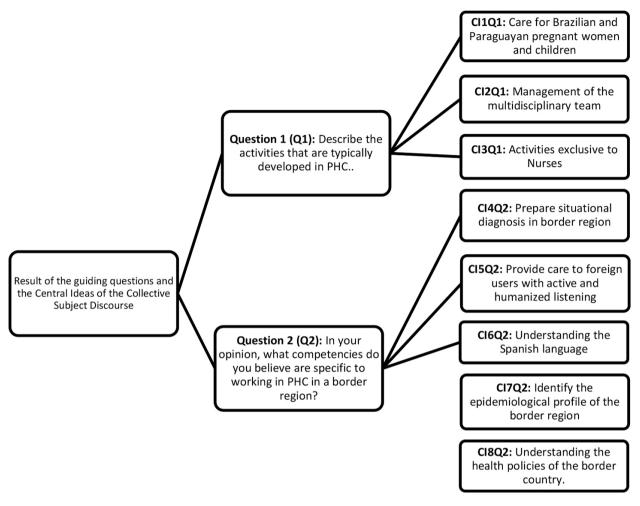
CI3Q1: [...] I do every day: several procedures exclusive to nurses, such as catheterizations, supervision of the nursing team, referrals to the reference network and Risk Classification, urgent and emergency care. (NUR. 36)

The second question addressed the competencies seen as essential for working in PHC in border communities. Through analysis of the responses, four CIs were identified, as shown below:

CI4Q2:[...] it is necessary to recognize the distinct profile of border communities, so that an efficient situational diagnosis can be developed. At the same time, I have to train my team so that they can provide humanized, welcoming care that respects the characteristics of each individual.(NUR. 60)

CI5Q2: [...] here we need to constantly look at issues of inclusion and diversity, several people who are served here,

Figure 1 - Guiding questions and the Central Ideas of the Collective Subject Discourse. Foz do Iguaçu, Paraná, Brazil, 2020



Source: Data collected by researchers, 2020.

if they want, speak Portuguese, now thinking about this pandemic we are experiencing, this population needs to be attended to within their specificities. (NUR. 23)

Cl6Q2: [...] when I started working here, I had to study Spanish, so that I could better understand some users and transmit my guidance. I realized that when not being well understood, patients did not follow the prescribed nursing care, communication is my main link. (NUR. 14)

CI7Q2: [...] it is necessary to know the recurrent diseases in border communities, Brazil and Paraguay are countries with free movement of people, thus, transmissibility is extremely high. Unfortunately, my hands

are tied because there are no health policies to meet our needs. (NUR. 38)

CI8Q2: [...] I need to have a close look at the social issues of Paraguayan families who come here at the unit, sometimes, they live in a situation of extreme poverty, if this recognition does not happen, these patients will not be able to continue with the treatment. Faced with this reality, I have to know Paraguay's health policy and thus check possibilities for assistance. (NUR. 55)

In the construction of the CSDs, 28 competencies were listed, distributed between assistance (14) and management (14), as shown in Figure 2.

Figure 2 - Competencies that emerged from the discourse of nurses. Foz do Iguaçu, Paraná, Brazil, 2020

ullet 1) Perform rapid tests for HIV diagnosis; VDRL; Hepatitis B and C;

- •2) Organize Hiperdia service groups;
- •3) Build a service flow for Basic Life Support;
- 4) Propose strategies for home visits;
- •5) Perform welcoming with active and comprehensive listening;
- 6) Handle clinical management of users with Sexually Transmitted Infections;
- 7) Conduct nursing consultations for adolescents, adults and the elderly;
- •8) Develop Nursing Care Systematization;
- 9) Perform bladder and feeding catheterization;
- 10) Monitor medication administration by the nursing team;
- 11) Perform the Puericulture consultation;
- 12) Perform prenatal consultation;
- 13) Organize spontaneous demand care;
- •14) Organize care through risk classification.

Management Competencies

Assistance

Competencies

- •1) Supervise and plan the daily activities of the unit's vaccination room;
- 2) Transfer the user to another health institution in a safe and efficient way;
- 3) Perform Compulsory Notification of diseases;
- 4) Propose and develop nursing protocols;
- 5) Develop communication with all professionals in the Health Care Network;
- 6) Develop work schedules for the nursing team and CHA;
- 7) Provide care to all users in compliance with SUS legal norms;
- 8) Propose continuous education based on team training needs;
- •9) Manage materials and supplies;
- 10) Monitor daily services of CHA and nursing teams;
- •11) Protect and care for the unit's assets;
- 12) Plan risk stratification for the unit;
- •13) Develop situational diagnosis in the unit and the assigned community;
- 14) Create reports on cytopathological exams and rapid tests collection.

Specific Competencies

- ullet 1) Understand the health policies of the border country;
- 2) Develop the situational diagnosis of the border community;
- 3) Identify the epidemiological profile of the border region;
- ullet 4) Provide care to foreign users with active and humanized listening;
- 5) Cultural approach to understand the specificities of users from another country.

Source: Data collected by researchers, 2020.

DISCUSSION

The competencies that emerged from the statements of the interviewed individuals were related to the competencies mentioned by the Professional Nursing Practice Law⁽¹⁶⁾ and the PNAB⁽¹⁵⁾. Most of the expected competencies are addressed in the discourses. At the same time, a greater number of activities performed by nurses that are not referenced by legal documents was found, as a result of self-responsibility for functions that are not within their scope.

Some competencies guided by the PNAB are for all healthcare professionals, such as protection and care for the unit's assets, involvement with Permanent Health Education processes and filling out Compulsory Disease Notification forms⁽¹⁵⁾. Such actions were considered the nurse's exclusive responsibility. This result shows the inequality in the division of tasks performed by healthcare professionals and the nurses' lack of knowledge about the exclusive competencies of the profession and those assigned to all team members.

In one multicenter research conducted with 40 nurses working in PHC in five Brazilian municipalities, the factors that trigger work overload were investigated. Among the evidence, excessive workload occurs as a result of numerous competencies to be developed, which are not the exclusive responsibility of nurses, a common scenario in teams with staff shortages⁽¹⁹⁾.

Similarly, in another research, the professional profile of 48 nurses who work in public/collective health in the states of Ceará and Paraíba was analyzed. It was identified that workers link the image of nurses with the meaning of "Doing everything". This reality moves the nursing profession away from its essence, by assuming functions that are not its responsibility, triggering the feeling of not belonging to a professional category, due to the vulnerability of the profession's identity⁽²⁰⁾.

The gap identified in this competency mapping refers to nurses' care practice beyond the structure of the unit, as it was not pointed out in the participants' statements. The exercise of such competence is guided by PNAB regarding care in community spaces, associations, schools, etc., across all life cycles. None of the nurses' discourses consider such external activities, except for the competency to "Organize Hiperdia service groups" and "Propose strategies for home visits", as these activities have legal determinants for effectiveness and compliance. Health education is a well-known important strategy for achieving and effectively implementing preventive practices in public health, and when there is structure and opportunity to carry out this service, nurses should be able to manage educational actions in the community.

The School Health Policy (SHP) is a program that contributes to the development of nurse competencies for educational practices in environments outside the health unit, as it provides opportunities for the inclusion of educational health actions in school spaces⁽²¹⁾. A study analyzed the results of SHP in a school in the municipality of Fortaleza in Ceará and found that some of the teachers were unaware of the program's methodology, that is, they were unaware of the ways to develop and execute PSE strategies. This context demonstrates the need to link nurses and teachers to educational practices at schools⁽²¹⁾.

A study was conducted in Brasília, Federal District, with the objective of analyzing the execution of the PSE by nurses, in the period before and during the COVID-19 pandemic. It was possible to demonstrate an increase in schools' adherence to the program and a predominance of records relating to the topic of oral health and vaccination check in both periods, but with a quantitative reduction due to the pandemic⁽²²⁾.

In a broader perspective, the competencies of PHC nurses beyond the spaces of the health unit have been gaining notoriety and spaces for discussion. In the city of Porto, Portugal, health promotion programs are emerging with the aim of guiding children and adolescents to develop knowledge, values, and attitudes necessary for a healthy lifestyle and avoiding risky behaviors. These educational processes are led by Portuguese public health nurses⁽²³⁾. The changes allowed the school health area to evolve and become a fundamental element in promoting healthy lifestyles and preventing diseases among children and young people.

The following question concerns the competencies that participants consider fundamental for working in PHC in border cities. The group considered it essential to develop skills to prepare the situational nursing diagnosis of these communities. As they are border regions with free movement of people, with intense cultural and epidemiological plurality, it is complex to establish comprehensive health care. The competence "Develop situational diagnosis of the border community" was significant among the CSD. This service is considered in the literature as one of the most important research tools, in which it is possible to understand the profile and needs of the registered community and, subsequently, plan and program assistance. It also supports the unification and planning of services provided by the multiprofessional team⁽²⁴⁾.

The second competency highlighted the need for analysis and reflection on the development of skills for the cultural approach to nursing, that is, based on the principles of humanization, to provide an assistance capable of reaching all factors intrinsic to the profile of each user. The group highlighted the daily need to prepare all the unit's employees so that they can provide the best welcoming to foreign users. Another research aimed to map interventions for the development of cultural competencies during nurses training, through an integrative review of the scientific field, and found that the main possible strategies are through mobility programs and courses to improve competence⁽²⁵⁾.

The third specific competence deals with the need for nurses to understand the languages of Paraguay. The presence of Guarani (a native language of Paraguay, but little present in the population) and Spanish is common among Paraguayan users. This strategy arises from the linguistic difficulties that can compromise active listening and the quality of the service provided by the nurse to the user.

Participants reported that the work environment allowed for greater learning and understanding of Spanish, especially gestures and expressions that can be used in nursing consultations. However, there have never been educational actions to develop this competence. This is consistent with a study that investigated nurses' knowledge about labor and childbirth care in the border region of the state of Amapá with French Guiana. Linguistic competence was identified as a fundamental factor in providing care that involves cultural aspects, which are sometimes limiting for effective communication, considering the existence of different ethnicities, in addition to foreigners and the need to develop linguistic competence for qualified care⁽²⁶⁾.

The competence regarding to "Identify the epidemiological profile of the border region" concerns diseases that are easily transmissible between groups that move daily from one country to another. With these data, it can be inferred about the nurse's difficulty in observing the epidemiological characteristics of the border community due to the discontinuity of preventive strategies, such as the vaccination system, which only exists in Brazil.

In a study conducted in border cities in Mato Grosso do Sul in 2021, investigated the degree of morbidity for HIV/AIDS by gender and age group. The results revealed a significant increase in the disease in different groups and the difficulty in knowing the characteristics of the public, as it is a population that daily migrates between border countries, in addition to compulsory notification being performed only in Brazil⁽²⁷⁾.

The numerous adversities for nurses' work in PHC in border communities are evident, especially when it comes to studying and building the epidemiological profile of these groups. The first step is to recognize and support the practice of this professional, involving all levels of management (municipal, state and federal), with bilateral agreements between border countries so that they can outline strategies for continuity of care.

In the competence that guides knowledge about the healthcare policies of the country in the border, the healthcare services provided in each country in South America are intensely heterogeneous, which contributes to disparities in the provision of services in the border regions. Consequently, the nurse has the role of advocating for this population that receives care in PHC but does not reside in Brazil and will continue with treatment in the country of origin. It is a fact that such complexity is because the absence of a referral and counter-referral system between border countries and, consequently, affects the scope of quality assistance⁽²⁸⁾.

Despite the above, among the limitations of this study, the pandemic scenario possibly affected nurses' acceptance to participate and consequently the formation of the total group of participants due to the excessive workload. Another limitation was that contact with nurses only occurred by email, since it may have directed the invitation to participate to other spaces (spam).

FINAL CONSIDERATIONS

The competencies that emerged in the CSD were those related to the construction of a situational diagnosis capable of describing the epidemiological characteristics of the border population. The competencies also referred to the promotion of a welcoming environment with active and humanized listening to foreign users and the need for nurses to know the public health policies of the neighboring country. The results of this study emphasize the need for public health policies that cover border regions, with support from the countries involved in the professional practice of these nurses.

Another important point relates to continuing health education, which plays a relevant role in developing the competencies of nursing professionals. The gaps identified in this study can contribute to the planning of continuing education actions aimed at developing the necessary competencies.

The resolution of problems in planning health services in border communities highlighted in this study does not depend only on nurses, but on the continuous effort of health services, teams, and management spheres. Thus, it is expected the emergence of policy proposals for bilateral agreements, recognition of foreign users attended daily by the SUS and continuing qualification of all health professionals.

Although it is understandable that nurses have acquired new competencies in recent years, it is important to be clear about their professional profile in all areas of activity and to support the provision of continuing care for users and populations, avoiding work overload and promoting professional appreciation.

REFERENCES

- 1. Souza JF, Zaccaro KRL, Brandão NPCL, Primo CC, Santana RF, Brandão MAG. Systematization of Nursing Care: How did the concept mature? Rev Bras Enferm. 2023;3(76). doi: https://doi.org/10.1590/0034-7167-2022-0464pt
- Costa SSV, Ximenes Neto FRG, Oliveira EN, Cunha ICKO. Elaboração de instrumento e validação de uma matriz de competências para enfermeiros da estratégia saúde da família. Arq Ciên Saúde UNIPAR. 2023;27(2):996-1006. doi: https://doi. org/10.25110/argsaude.v27i2.2023-027
- World Health Organization. Expanding the role of nurses in primary health care [Internet]. Geneva: WHO; 2018. [cited 2022 Jan 10]. Available from: https://iris. paho.org/handle/10665.2/34958
- Paquiela EOA, Figueiredo EBL, Lemos PFS, Abrahão AL. Experiência, sentido e palavra: reflexões sobre o ensino da história da enfermagem. Educ Teor Prat. 2023;33(66):e23. doi: https://doi.org/10.18675/1981-8106.v33.n.66.s15982
- Costa PPS, Lima CA. Direitos humanos e acesso à saúde em regiões de fronteira.
 Rev Foco 2023;16(9):e3199. doi: https://doi.org/10.54751/revistafoco.v16n9-185
- Pereira E, Carvalho M. Pendular migration and health: profile of Paraguayans undergoing dialysis treatment in an international border municipality. Rev Enferm Cont. 2022;11:3942. doi: https://doi.org/10.17267/2317-3378rec.2022.e3942

- 7. Arenhart CGM, Rizzotto MLF, Carrijo AR. Opinion leaders' conceptions about citizenship and the right to health on the trinational border. Physis. 2022;32(4):e320406. doi: https://doi.org/10.1590/S0103-73312022320406
- 8. Presidência da República (BR). Casa Civil. Subchefia para Assuntos Jurídicos. Lei nº 13.445, de 24 de maio de 2017. Institui a Lei de Migração. Diário Oficial União. 2017 maio 25 [cited 2022 Nov 05];154(99 Seção 1):1-10. Available from: https://pesquisa.in.gov.br/imprensa/jsp/visualiza/index. jsp?jornal=1&paqina=1&data=25/05/2017&totalArquivos=304
- 9. Baggio MA, Schapko TR, Toninato APC, Ravelli APX, Silva RMM, Zilly A. Pré-natal em região de fronteira na vigência da pandemia da Covid-19. Saúde Bebate. 2023;47(138):558-70. doi: https://doi.org/10.1590/0103-1104202313814
- Hirano AR, Picco TM, Pimenta RA, Baggio MA. Continuidade do cuidado da criança na Atenção Primária à Saúde em região de fronteira. Interface. 2023;27:e220697. doi: https://doi.org/10.1590/interface.220697
- Furquim GGT. Migrações internacionais no Brasil e a pandemia da Covid-19: esboço de suas consequências. Rev Esp Acad. 2023;23(240):72–84 [cited 2023 Sep 20]. Available from: https://periodicos.uem.br/ojs/index.php/EspacoAcademico/ article/view/66891
- 12. França JR, Areosa J, Figueiredo VCN. Desafios do trabalho de enfermeiras na fronteira Brasil-Bolívia. Rev Laborativa 2021;10(1):68-91. [cited 2022 Jan 05]. Available from: https://ojs.unesp.br/index.php/rlaborativa/article/view/3406
- 13. Brandão HP. Mapeamento de competências: ferramentas, exercícios e aplicações em qestão de pessoas. 2. ed. São Paulo: Atlas; 2017.
- 14. Bardin L. Análise de conteúdo. 70. ed. São Paulo: Almedina; 2016.
- 15. Ministério da Saúde (BR). Gabinete do Ministro. Portaria nº 2.436, de 21 de setembro de 2017. Aprova a Política Nacional de Atenção Básica, estabelecendo a revisão de diretrizes para a organização da Atenção Básica, no âmbito do Sistema Único de Saúde (SUS). Diário Oficial União. 2017 set 22 [cited 2022 Feb 22];154(183 Seção 1):68-76. Available from: https://pesquisa.in.gov.br/imprensa/jsp/visualiza/index.jsp?data=22/09/2017&jornal=1&paqina=68&totalArquivos=120
- 16. Presidência da República (BR). Casa Civil. Subchefia para Assuntos Jurídicos. Lei nº 7.498, de 25 de junho de 1986. Dispõe sobre a regulamentação do exercício da enfermagem, e dá outras providências. Diário Oficial União 1986 jun 25 [cited 2022 Feb 22];165:9273. Available from https://legislacao.presidencia.gov.br/atos/?tipo=LEI&numero=7498&ano=1986&ato=b30ITQE5UMBpWTbd9
- 17. Ministério da Saúde (BR). Conselho Nacional de Saúde. Resolução nº 466, de 12 de dezembro de 2012. Aprova diretrizes e normas regulamentadoras de pesquisas envolvendo seres humanos. Diário Oficial União. 2013 jun 13 [cited 2022 Feb 22];150(112 Seção 1):59-62. Available from https://pesquisa.in.gov.br/imprensa/jsp/visualiza/index. jsp?data=13/06/2013&jornal=1&paqina=59&totalArquivos=140

- 18. Lefreve F, Lefevre AMC. Discourse of the collective subject: social representations and communication interventions. Texto Contexto Enferm. 2014;23(2):502–7. doi: https://doi.org/10.1590/0104-07072014000000014
- Seabra IL, Cunha CLF, Lemos M, Pereira AAC, Alvarenga EC, Pinho ECC, et al. Características empregatícias dos enfermeiros da atenção básica em um território amazônida. Rev Elet Acervo Saúde 2023;23(6):e12377. doi: https:// doi.org/10.25248/reas.e12377.2023
- Santana KFS, Marinho MNASB, Cavalcante ASP, Machado LDS, Silva LF, Guedes MVC, et al. Reflexões acerca da identidade do enfermeiro na gestão dos serviços de saúde. Res Soc Dev. 2022;11(7):e30011729812. doi: https://doi.org/10.33448/ rsd-v11i7.29812
- 21. Presidência da República (BR). Casa Civil. Subchefia para Assuntos Jurídicos. Decreto nº 6.286, de 5 de dezembro de 2007. Institui o Programa Saúde na Escola PSE, e dá outras providências. Brasília, DF; 2007. [cited 2022 Aug 22]. Available from: https://www.planalto.gov.br/ccivil_03/_ato2007-2010/2007/decreto/d6286.htm
- Scherer MDA, Sacco RCCS, Santana SO, Xavier MF, Bastos HAD, Prado NMBL, et al. The School Health Program in the Federal District, Brazil, before and during the COVID-19 pandemic. Saúde Debate. 2022;46(spe3):45–61. doi: https://doi. org/10.1590/0103-11042022E303
- 23. Bessa SCR. Comunidade escolar, estilos de vida e empoderamento comunitário [dissertação]. Portugal: Universidade Católica Portuguesa do Porto; 2023. [cited 2023 Oct 02]. Available from: https://repositorio.ucp.pt/bitstream/10400.14/41345/1/203309375.pdf
- 24. Ministério da Saúde (BR) [Internet]. Política Nacional de Humanização. Brasília, DF: Ministério da Saúde; 2017 [cited 2022 Feb 20]. Available from: https://www.gov.br/saude/pt-br/acesso-a-informacao/acoes-e-programas/humanizasus
- 25. Jose EAR, Coelho AMSRM, Gouveia MC, Paiva MG, Brito IS, Berardinelli LMM,et al.Development of cultural competence in the training of nursing students. Glob Acad Nurs J. 2021;2(3):e154. doi: https://doi.org/10.5935/2675-5602.20200154
- Souza ENC, Zilly A,Peres AM, Fumincelli L, Fabriz L, Arcoverde MAM, et al. Competencies of the public health nurse in a frontier region: a scoping review. Acta Paul Enferm. 2023;36:eAPE00552. doi: https://doi.org/10.37689/acta-ape/2023AR005522
- 27. Werle JE, Teston EF, Marcon SS, Cunha GH, Mandu JBS, Junior MAF. HIV / AIDS in a triple border region: subsidies for reflections on public policies. Esc Anna Nery. 2021;23(3):e20200320. doi: https://doi.org/10.1590/2177-9465-EAN-2020-0320
- 28. Tavares AJ, Madruga EC. O impacto da construção da nova ponte entre Brasil e Paraguai, em Foz do Iguaçu, no processo de integração regional na saúde pública. Ver Redef Front. 2023;1(1):51-74. doi: https://doi.org/10.59731/vol1iss1pp51-74

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