Abstract

Objective: To identify the scientific evidence on the specific competencies for the professional practice of public health nurses in a frontier region.

Methods: Scoping Review, according to Joanna Briggs Institute, through the guiding question: “What is the knowledge production about the competencies necessary for the professional practice of public health nurses in a frontier region?” Searches were conducted in five databases, with original English, Spanish, Portuguese, and French studies published or made available by June 2020, using the descriptors: nurse, competence, and border areas.

Results: Among the 941 studies found, 58 were selected for full-text reading, resulting in a final sample of eight studies from different countries: Brazil, Mexico, Sweden, Thailand, Taiwan, and the United States of America. From the analysis of each study, five specific competencies of the public health nurse who works in frontier regions emerged, being Competence for: 1) Cultural approach; 2) Competence for integral and collective nursing care in a frontier region; 3) Policy for assistance in frontier communities; 4) Linguistic-communicative; 5) Transnational care.

Conclusion: The selected studies pointed out cultural and social competencies despite diversified frontier environments. The nurse’s role in a frontier region changes as modern society configures itself and reorients itself toward new identity possibilities. Such changes reflect the need for effective health care that promotes proximity to cultural differences.

Keywords
Nurses; Professional competence; Public health; Border health; Border areas

Descritores
Enfermeiras e enfermeiros; Competência profissional; Saúde pública; Saúde na fronteira; Áreas fronteiras

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Resumo

Objetivo: Identificar as evidências científicas sobre as competências específicas para a prática profissional do enfermeiro de saúde pública em região de fronteira.

Métodos: Scoping Review, conforme Instituto Joanna Briggs, por meio da questão norteadora: “Qual a produção de conhecimento sobre as competências necessárias para prática profissional de enfermeiros de saúde pública em região de fronteira?” Foram realizadas buscas em cinco bases de dados, com inclusão de estudos originais em inglês, espanhol, português e francês, publicados ou disponibilizados até junho de 2020, utilizando os descritores: enfermeiro, competência e áreas de fronteira.

Resultados: Dos 941 estudos encontrados, 58 foram selecionados para leitura na íntegra, resultando em uma amostra final de oito estudos de países distintos, sendo: Brasil, México, Suécia, Tailândia, Taiwan e Estados Unidos da América. A partir da análise de cada estudo, emergiram cinco competências específicas do enfermeiro de saúde pública que atua em regiões de fronteira, sendo Competência para: 1) Abordagem cultural 2) Competência para o cuidado integral e coletivo de enfermagem em região de fronteira; 3) Política para assistência em comunidades fronteiras; 4) Linguística-comunicativa; 5) Atendimento transnacional.

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Conflicts of interest: nothing to declare.
Introduction

Etymologically, the term frontier refers to something’s front, frontage, or face; originating from the Latin word *frontis*, it may represent one’s beginning where everything seems to end.\(^1\) When thinking about the current globalized world and the changes in the geopolitical scenario, the interactions between frontiers have become a priority in the economic strengthening of countless countries, including Brazil.\(^2\)

In frontier regions, one must recognize that the health sector significantly influences the international relations field.\(^3\) However, many frontier cities still have legal obstacles to implementing concrete health care. We emphasize that Brazil is the only country in South America that has a universal and equitable public health system. Therefore, this dissimilarity generates a higher number of people seeking health services in the neighboring country, which compromises the work planning provided.\(^4\)

The reality is that, in frontier regions, floating populations migrate from one country to another in search of better healthcare conditions, and in most cases, there is a demand for the Brazilian healthcare system’s infrastructure, which results in a deficit in municipal budgets as foreigners are not considered in public spending.\(^2,3\)

Given that nursing represents the largest workforce in the Unified Health System (SUS), the daily routine of these professionals in frontier cities is different from any other region.\(^5\) As nursing practice is essential for the frontier population’s care, whether in management and/or assistance, nursing is integrated into the regulation and effectiveness of SUS’s principles and guidelines, as well as into strengthening the links between the population and health professionals.\(^6,7\)

Nurses play an important role in all care systematization, and considering that their management functions come from the occupation’s historical process, health researchers have legitimized increases in management competencies as a strategy to make the professional even more productive, given the new demands of the work field.\(^8\)

A nurse who works in frontier regions coexists with the peculiarities of these communities, such as the linguistic and cultural plurality that require greater professional skills for effective care, as well as difficulties in performing comprehensive care, since there is no guaranteed return of the foreign user.\(^9\)

Authors describe that the cultural barrier coupled with nursing care discontinuity in frontier regions compromises the very core of the profession, which is recognized as the care science.\(^10\)

This fact corroborates a study carried out in a child nutrition center in Foz do Iguaçu, Paraná, a

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Conclusões: Apesar de ambientes fronteiriços diversificados, os estudos selecionados apontaram competências de natureza cultural e social. O papel do enfermeiro em região de fronteira muda na medida em que a sociedade moderna se configura e se reorienta em direção a novas possibilidades identitárias. Tais mudanças refletem a necessidade de efetivar o cuidado em saúde que promova a proximidade das diferenças culturais.

Resumen

Objetivo: Identificar las evidencias científicas sobre las competencias específicas para la práctica profesional de los enfermeros de salud pública en regiones de frontera.

Métodos: Scoping Review, de acuerdo con el Instituto Joanna Briggs, mediante la siguiente pregunta orientadora: “¿Cuál es la producción de conocimientos sobre las competencias necesarias para la práctica profesional de los enfermeros de salud pública en regiones de frontera?”. Se realizaron búsquedas en cinco bases de datos, que incluyeron estudios originales en inglés, español, portugués y francés, publicados o colocados a disposición hasta junio de 2020 y que utilizaron los descriptores: enfermero, competencia y áreas de frontera.

Resultados: De los 941 estudios encontrados, se seleccionaron 58 para lectura completa, que dio como resultado una muestra final de ocho estudios de diferentes países, a saber: Brasil, México, Suecia, Tailandia y Estados Unidos de América. A partir del análisis de cada estudio, surgieron cinco competencias específicas de los enfermeros de salud pública que actúan en regiones de frontera: 1) Enfoque cultural, 2) Competencia para el cuidado integral y colectivo de enfermería en regiones de frontera, 3) Política para la atención en comunidades fronterizas, 4) Lingüística comunicativa y 5) Atención transnacional.

Conclusión: A pesar de haber diversos ambientes fronterizos, los estudios seleccionados indicaron competencias de naturaleza cultural y social. El papel de los enfermeros en regiones de frontera cambia en la medida en que la sociedad moderna se configura y se reorienta hacia nuevas posibilidades identitarias. Estos cambios reflejan la necesidad de materializar los cuidados de la salud que promuevan la proximidad de las diferencias culturales.
triple frontier city with Paraguay and Argentina, showing how the disruption of integrated health and nursing care generates risks for vulnerable groups, such as preterm newborns, in which the municipal health network does not have reference and counter-reference protocols for the return and follow-up of children residing in the neighboring country. (9)

Thus, the nurse inserted in this context, and as a nursing care provider, has no technical and legal support to ensure quality care, because the current legislation does not guide specific competencies for the work. (11) Therefore, the definition of such competencies could support ways to provide comprehensive care to the entire frontier population. (10,11)

Considering the term competence refers to the worker’s ability to perform the service, based on the knowledge acquired in their training and through professional and personal experiences. (12)

Given the particularities of nursing work in frontier regions and the need to describe specific competencies for their professional practice, this study aims to identify the scientific evidence on the competencies of public health nurses in frontier regions.

Methods

This is a review study in the format of Scoping Review using the theoretical and methodological framework of The Joanna Briggs Institute (JBI) for Scoping Reviews, (13) organized in the following steps:

1. Identifying the research question, being: “What is the production of knowledge about the competencies necessary for the professional practice of public health nurses in a frontier region?

2. Identifying relevant studies, in which an initial search was conducted in the Latin American and Caribbean Health Sciences (LILACS), Scientific Electronic Library (SCIELO), National Library of Medicine (PubMed), Web Of Science, and SCOPUS electronic databases. Descriptors were established from the Health Sciences Platforms (DeCS) and terms in the Medical Subject Headings (MeSH), as well as keywords for the effective search. According to the JBI recommendations for Scoping Review, the Population, Concept, and Context (PCC) strategy was employed. Thus, the following were considered: (P) Nurses, (C) Competence, and (C) Frontier Areas. The references listed in the studies found were also analyzed, aiming to identify additional documents for insertion in this review. The Boolean-controlled operators AND, OR, and NOT (12,13) were used to compose the search keys.

3. Study selection, in which the words contained in the titles, abstracts, and descriptors were analyzed, and the selected studies answering the guiding question of this review were read in full. As inclusion criteria, we considered qualitative, quantitative, and quasi-quantitative studies; primary studies; systematic reviews, meta-analysis and/or meta-synthesis; books; and guidelines, published or available until June 2020, that addressed the topic “public health nurses’ competence for professional practice in a frontier region”.

4. Data mapping occurred through an adapted instrument prepared by the authors for information extraction, according to JBI guidelines, which contemplated: Publication year, Country, Objective, Population, Methodology, Intervention type, comparator and its details, Intervention duration, Results and its details, main conclusions related to the scope review question, and Study Authors. (13)

5. And lastly, the compilation, summary, and results report, based on the discoveries, five competencies were identified for the professional nursing practice in a frontier region. The study reading and selection process was carried out by two independent reviewers, in which the conflicting studies were reviewed and discussed among the reviewers in order to obtain consensus regarding inclusion or exclusion.

Results

A total of 941 studies and documents with research potential were mapped. Among these, 214 were
excluded for duplicity, resulting in 727 publications for the title and abstract analysis. Next, 669 studies were excluded for not answering the review question, and the remaining 58 were selected for reading in full. In the methodological sequence, 52 studies were excluded due to the absence of information about the nurse’s competencies for working in frontier regions, and two studies were identified via manual search. The final sample summed up to eight studies analyzed and included in this review, as shown in figure 1.

In this review, the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) checklist was strictly followed. It is a specific tool for reviews and is assertive for timely description in each step of the study. In this sense, the study search and selection process are presented by the flowchart adapted from PRISMA.

Among the eight studies selected, seven were published in English and one in Portuguese, between the years 2006 and 2020. The most prevalent methodology was qualitative, followed by review research, including studies investigating the social principles of the nurse’s role in cultural competence in frontier regions. The quali-quantitative studies adopted semi-structured questionnaires to explore professional experiences. The studies’ objectives and main results are also described. Table 1 shows the studies identified in the review.

Discussion

From the analysis of the studies mapped in this scoping review, five competencies emerged, considered by the authors to be specific to the professional practice of public health nurses in frontier regions. In order to didactically structure the discussion session, this will be explained by categories.

Competence in cultural approach

The nurse’s cultural competence is pointed out in four of the eight studies in the review, and the authors recognize the individual and collective characteristics of frontier people, as they condition nursing work. One of the Swedish studies pointed out that the first discrepancy between the foreign patient and the nurse arose...
Table 1. Overview of the studies identified in the review, according to authors, publication year, origin country, title, objectives, and results

<table>
<thead>
<tr>
<th>Authors/ Country</th>
<th>Title</th>
<th>Objective(s)</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bigbee, 2009, EUA</td>
<td>Public health nurses in a rural/frontier nursing practice(15)</td>
<td>To describe and compare the competency levels and practice patterns of public health nurses working in rural and frontier regions of Idaho state with nurses working in the capital city.</td>
<td>Competency levels of nurses in rural and frontier regions were significant in areas such as cultural competency, communication, collective health, and leadership, with the lowest in management and public health policy.</td>
</tr>
<tr>
<td>Brasil, 2006, Brasil</td>
<td>Nurses in Mercosur: Human Resources, Regulation and Comparative Professional Education(16)</td>
<td>To study the nursing dynamics in the Mercosur member countries (Brazil, Paraguay, Uruguay, and Argentina), taking into account human resources and the regulation and professional training processes.</td>
<td>The nurses in each Mercosur country have similar competencies, such as a humanistic vision of care through the collective dimension, health management, and the need to strengthen nurses’ political competence.</td>
</tr>
<tr>
<td>Dupin, et al, 2020, Suécia</td>
<td>Public health nursing education is seen through the lens of super-diversity: a resource for global health(17)</td>
<td>Nursing curricula evaluation according to the super-diversity concept.</td>
<td>Nursing courses need to be restructured to adapt to the cultural competence specificities and to insert the theme by the professors for such training.</td>
</tr>
<tr>
<td>Kalengay et al, 2015, Suécia</td>
<td>It’s a dilemma: nursing professionals’ perspectives on health examinations of newly arrived migrants(18)</td>
<td>Investigate the experiences of nurses in screening newly arrived migrants that have subsidized skills for clinical practice.</td>
<td>Limitations for the cultural approach in triage services. Even with continuing education strategies, the nurses described a mismatch between Swedish health policies and professional practice reality, a fact that limits humanized care to the immigrant.</td>
</tr>
<tr>
<td>Lin et al, 2015, Taiwan</td>
<td>Cultural Competence and Related Factors among Taiwanese Nurses(19)</td>
<td>A study of Taiwanese Nurses’ cultural competence for foreigners’ care.</td>
<td>The nurses reported communication barriers in caring for people from different cultures. Although the cultural competence level among participants was low to moderate, they expressed positive attitudes and respect for patients’ cultural backgrounds and interest in learning about cultural care.</td>
</tr>
<tr>
<td>Rosemberg et al, 2020, EUA</td>
<td>Transnationalism: A Framework for Advancing Nursing Research with Contemporary Immigrants(20)</td>
<td>Discuss transnational nursing competence as a strategy for contemporary immigrant care.</td>
<td>Transnational competence is an important way in which nursing research can contextualize in greater depth all the characteristics of the immigrant patient.</td>
</tr>
<tr>
<td>Songwathana &amp; Siriphan, 2015, Tailândia</td>
<td>Thai nurses’ cultural competence in caring for clients living in a multicultural environment (21)</td>
<td>To assess the cultural competence level of Thai nurses in caring for clients living in a multicultural environment.</td>
<td>The results point to the cultural competence importance for Thai nurses as a strategy to reduce nurses’ stress and conflicts when working in multicultural environments in the Thailand-Malaysia frontier region.</td>
</tr>
<tr>
<td>Martinez Villa, Rangel Flores 2018, Mexico</td>
<td>Experiences that influence obstetric care by Mexican nurses(22)</td>
<td>To know what and how professional experiences influence midwifery nursing processes in frontier regions of northern Mexico.</td>
<td>The limitation arises from the language comprehension difficulty, and the lack of institutional means for the assistance to be effective, or, in other words, the linguistic and ethnic diversity is too wide to be faced with few resources.</td>
</tr>
</tbody>
</table>

from a misunderstanding of the health and disease process by the professional since health models are different and there is inexperience on the professional’s part in providing care with active listening and sensitivity to each life context, for foreigners or not.

Other authors(19) describe that the nurse’s cultural competence is based on fundamental theoretical principles that should be addressed starting in their education, with emphasis on the anthropology and theology branches, which can collaborate with understanding the entire intercultural conjunction of the patient. With this, nurses can transcend nursing care beyond national and ethnic issues, thus being executed from a holistic and more humanized systematization.(22)

The study(17) developed in Geneva, portrays that due to the increase of health care services in the Swedish frontier regions and given the nurses’ degree of responsibility in this context, cultural competence should already be part of the nursing courses’ curricula, because only then can viable strategies for care performance be developed.

This fact corroborates a study conducted with nursing trainees working in indigenous communities in the frontier between Brazil and Venezuela. The researchers recognize that the cultural shock in the population is inevitable but can be minimized through specific training and urgent restructuring of the competence profile developed in future nurse training.(22)

Such limitations to cultural competence effectiveness were also described in the Thai study in this review, which assessed nurses’ training working in frontier areas.(20) The groups served were mostly Thai Buddhists, Malay Muslims, and native Thais of Chinese descent who migrated from other regions of the country (usually from northeastern Thailand, where tribes and people are living in mountains frontier Myanmar). In this scenario, without proper preparation to perform cultural care and legislative support, nurses sometimes performed cultural care without legal support.

The studies(17-20) showed consensus that the nurses’ cultural competence needs to be prioritized in every work context in frontier regions, with rec-
ognition of cultural beliefs and knowledge of the other, focusing on the elimination of access barriers for minority groups. Thus, it is fundamental that nurses understand that their work is reoriented as population groups change and move towards new identity possibilities, which reflect the need to create common spaces for connectivity.

Political Competence for Assistance in Frontier Communities

The Brazilian study identified in the review,(16) addresses a comparative analysis of the professional nursing legislation of each country that composes the Common Market of the South (MERCOSUR), which is an economic agreement between Brazil, Argentina, Paraguay, and Uruguay. Therefore, we notice that, in the face of numerous divergences between the laws of professional nursing practice in each country, the nurses’ political competence emerges as a priority for the effectiveness of critical-reflexive care, with a focus on transient populations that move easily between the respective countries.

Frontier communities are at the forefront of providing care to groups of international origin, a fact that reveals numerous governmental, social, and economic disagreements between countries. A Brazilian study demonstrated, when investigating Bangladeshi immigrants’ experiences in Primary Health Care, that individuals who migrate from one country to another are at the mercy of irregularities in civil rights provision, so nurses need socio-political attributions to provide services to this public.(23)

Researchers, when constructing an attribute guide for the nurses’ political competence, concluded that professionals have a limited and fragmented view of the subject, a fact that results in an uncritical and neutral stance, and thus, sometimes expecting several social transformations in health. Thus, considering that political competence needs further discussion to exemplify its practice and that the nurse, in order to be active in the political field, does not necessarily need to be allied to any party or organization.(24)

Understanding that every attitude and moral judgment are political action, thus, nurses perform such competence daily without directly recognizing it. Moreover, the complex health scenario in frontier regions requires a socio-political-critical-reflexive posture from the professional, in face of the social paradigms that still exist.(16,24)

Communicative-Linguistic Competence

The study(22) conducted with obstetric nurses in frontier communities of northern Mexico, reports that the nursing work is more meaningful when the competence in communication and certain language domains are strengthened. Given that many pregnant women do not speak their native language, the entire care process needs to align with the patient’s profile, thus nursing care has come to achieve greater breadth and effectiveness.

Researchers describe that language barrier are predisposing factors in compromising quality care. Considering that nurses are unlikely to know numerous languages, understanding the meaning of certain non-verbal communication signs that are present in various cultures and can support a greater range of care, therefore, it is necessary to minimally know these signs.(25)

Competence for transnational service

Transnational nursing competence is pointed out in the study(19) where contemporary characteristics of migratory populations are contextualized. The authors assume that internationality refers to the inter-nation relationship and transnationality is not limited to frontiers, and this is a direct result of computerized systems that favor foreign communication and the disappearance of geographical distance. Thus, new forms of social spaces are constructed, in which the transnational foreigner will not break off their relations with their homeland(21,26,27).

A survey conducted with Mexican foreigners living in U.S. frontier regions showed several transnational activities, based on daily contact promoted by social networks.(27) Therefore, these ties and social relationships have implications for the health of these populations, and the nurses’ transnational competence is designed to guide greater comprehension of these people’s cultural diversity.
Competence for integral and collective nursing care in a frontier region

The nurse’s competence for comprehensive care involves the areas of health services management, epidemiology, social sciences, and other related areas, which indicates the need for a combination of specific knowledge, thus making it a complex knowledge to be performed by the professional.\(^{(28,29)}\)

The study conducted with nurses who work in outpatient clinics in rural and frontier regions of the state of Idaho, USA,\(^{(15)}\) considers the need for preventive and collective practices so that nursing work is performed with autonomy and interdisciplinarity. However, the study denotes difficult consensus around the term collective health, and it’s due to the country still prioritizing the biomedical model of care and little preventive care.

Studies state that the collective care of frontier nurses will require an even closer link with the community, due to specific regional problems, in addition to ethical and social responsibility with each patient.\(^{(30)}\) Nursing, as a precursor of integral, humanized, and family-based care, considers nurses to be agents prepared for the constant exchange of knowledge with active listening and health education practices, which can support individual and collective care throughout the life cycle of a frontier community.\(^{(29)}\)

Therefore, the nursing competence for collective health needs to start from integrated work with the multidisciplinary team, molded in a paradigm of health care that needs to be interrelated with the situation of every community member, these being the bases of primary health care. They emphasize that nurses need to know the entire health and disease process with an analytical evaluation of the situation and characteristics of the frontier, developing actions aimed at the entire conjuncture of the fixed and transient population, thus configuring a global health model, as a strategy to expand assistance beyond the geographical limits.\(^{(30)}\)

Conclusion

The list of competencies identified in this review meets the research question, and suggests that public health nurses who work in frontier regions are sometimes forced to perform non-referred care practices, as a way to prioritize human, holistic, integral, and cross-cultural care. We emphasize that the studies mapped come from different countries since the health contexts are not unique. The most prominent competence was cultural, indicated as essential for nursing services in frontier regions. Hopefully, this review’s results will contribute to the restructuring of nursing courses’ curricula by including this content. Consequently, it is necessary to produce new evidence on the problems identified in the management and health care in frontier cities, while the scientific field is still scarce in the perspectives of the theme studied.

References

Competencies of the public health nurse in a frontier region: a scoping review


