

# Nursing practice environment in Primary Health Care: a scoping review

Ambiente da prática de enfermagem na Atenção Primária à Saúde: revisão scoping Ambiente de la práctica de enfermería en Atención Primaria a la Salud: revisión de alcance (scoping review)

### ABSTRACT

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Objective: To examine the scientific evidence about the nursing practice environment in Primary Health Care. Methods: Three-step scoping review. 1) An initial research on CINAHL and MEDLINE. 2) A broader search using the same keywords and search terms in the remaining EBSCOHost platform databases. 3) Search the bibliographical references of the selected articles. The studies selected were from 2007 to 2018. Results: 19 articles were included, most reported findings of the nursing practice environment and results for clients, nurses, nurse managers and the efficiency of organizations, in Primary Health Care. Conclusion: Improving the environment of nursing practice has consequences on the quality of nursing care, with increased results for clients, nursing and Primary Health Care.

Descriptors: Nursing; Health Services Administration; Work Environment; Primary Health Care: Review.

#### RESUMO

Objetivo: Examinar a evidência científica acerca do ambiente da prática de enfermagem na Atenção Primária à Saúde. Métodos: Revisão scoping da literatura, com 3 etapas: 1) uma pesquisa inicial na CINAHL e MEDLINE; 2) uma pesquisa mais ampliada, utilizando as mesmas palavras-chave e termos de pesquisa, nas bases de dados restantes da plataforma EBSCOHost; 3) pesquisa nas referências bibliográficas dos artigos selecionados. Os estudos selecionados foram do período entre 2007 e 2018. Resultados: Foram incluídos 19 artigos; a maioria relatou achados do ambiente da prática de enfermagem e resultados para os clientes, para os enfermeiros, para os enfermeiros gerentes e para a eficiência das organizações, na Atenção Primária à Saúde. **Conclusão:** Melhorar o ambiente da prática de enfermagem tem consequências na qualidade dos cuidados de enfermagem, com aumento de resultados para os clientes, para a enfermagem e para a Atenção Primária à Saúde.

Descritores: Enfermagem; Administração de Serviços de Saúde; Ambiente de Trabalho; Atenção Primária à Saúde; Revisão.

#### RESUMEN

Objetivo: Examinar la evidencia científica acerca del ambiente de la práctica de enfermería en la Atención Primaria d a la Salud. Métodos: Revisión de alcance (scoping review) de la literatura en 3 etapas: 1) Una investigación inicial en la CINAHL y MEDLINE. 2) Una búsqueda más amplia utilizando las mismas palabras clave y términos de búsqueda en las bases de datos restantes de la plataforma EBSCOHost. 3) Buscar las referencias bibliográficas de los artículos seleccionados. Los estudios seleccionados han sido de 2007 a 2018. Resultados: Han sido inclusos 19 artículos, la mayoría relacionó hallazgos del ambiente de la práctica de enfermería y resultados para clientes, enfermeros, gerentes de enfermería y la eficiencia de las organizaciones, en Atención Primaria a la Salud. Conclusión: Mejorar el ambiente de la práctica de enfermería tiene consecuencias en la calidad de los cuidados de enfermería. con mayores resultados para los clientes, la enfermería y la Atención Primaria a la Salud. Descriptores: Enfermería; Administración de los Servicios de Salud; Ambiente Laboral; Atención Primaria a la Salud: Revisión.

### INTRODUCTION

Knowledge and scientific evidence about nursing practice environments (NPE) in the context of Primary Health Care (PHC) is scarce<sup>(1)</sup>.

Policy makers, health and professional organizations have proposed to redesign the health system in PHC with the aim of increasing citizens' accessibility, improving customer outcomes and maximizing efficiency<sup>(1)</sup>.

The aging of the population and the chronicity of many diseases cause an increase in demand for both PHC <sup>(1)</sup> consequently, by nurses<sup>(2)</sup>, so that the needs of these customers are attended to.

The International Council of Nurses<sup>(3)</sup> considers that there is a critical shortage of nurses, that motives are complex and varied, being, amongst the main ones, the unfavorable environments, which weaken the performance or contribute to the alienation and absent-mindedness of nurses and, all too often, distance them from work environments specific or profession<sup>(3)</sup>. As such, in the last decade, the global shortage of nurses has had the consequence of increasing international academic interest in the NPE<sup>(4)</sup>.

The practice of nursing care is developed in an environment of increasing complexity and stress for professionals<sup>(5)</sup>. The stressful nature of nursing can lead to burnout, low productivity, absenteeism<sup>(6)</sup> and, in the long run, contributes to the lack of staff<sup>(4,7)</sup>, further aggravating the problem<sup>(8)</sup>.

Knowing the environments where the care practices take place, we are contributing to improve them and, consequently, promote the quality of nursing care. The NPE is related to job satisfaction, the quality of nursing care and the safety of the client<sup>(9)</sup> and, yet, with the effectiveness of care for clients and the efficiency of organizations. Thus, the study of this theme presents fundamental contributions to the health policies of the health systems of any country.

The study of the NPE is essential to diagnose how we can improve it, how we can promote the quality of care that nurses provide and, therefore, contribute to the improvement of clinical practice contexts<sup>(10)</sup>.

The quality of nursing care is an essential element in the profession and refers, among other points, to the direct relationship between the client and the nurse. It depends on many factors, mainly the NPE<sup>(5)</sup>.

Lake defines the practice environment as the organizational characteristics of a work context that facilitate or constrain professional nursing practice<sup>(9)</sup>.

A favorable NPE leads to improved customer results, it is an essential factor for increasing nurses' job satisfaction<sup>(6-7,9)</sup>, being essential to maintain teams with safe staffing and retain nurses<sup>(8)</sup>.

On the other hand, poor NPEs, with a lack of management support, weak leadership and poor multidisciplinary relationship are associated with: decreased quality of care<sup>(1)</sup>; adverse events on customers<sup>(1)</sup> such as errors<sup>(11)</sup>; increased mortality and complications<sup>(12-13)</sup>; readmissions for complications<sup>(14)</sup>; rising health care costs<sup>(15)</sup>; ineffective provision of care, conflicts and stress among health professionals<sup>(5,11)</sup>; professional dissatisfaction and increased turnover of nurses<sup>(1,16-17)</sup>.

A safe NPE is characterized by good professional relationships among its members, management that supports nurses in the practice of care and balanced working hours<sup>(18-19)</sup>. It is also characterized

by a balance between the workload and the skills of nurses, time to respond to client needs, professional autonomy, adequate resources and opportunities for professional advancement<sup>(18-19)</sup>.

The most important characteristics of a NPE in PHC are support and management support; leadership and management; good multidisciplinary relationships between nurses and doctors; and quality of care<sup>(19-20)</sup>. Nurse managers play a key role in creating a favorable NPE<sup>(8)</sup>, positive<sup>(19)</sup> and promoting and providing quality care. They can also provide the necessary tools for the professional development of nurses and future managers<sup>(21)</sup>. Leadership influences NPE<sup>(22-23)</sup>. Without adequate skills and knowledge, it becomes difficult for nursing leaders to maintain a favorable practice environment<sup>(19,24)</sup>. The nurse manager is an engine of change on the path to excellence, organizing existing resources and creating a safe environment in nursing care<sup>(25)</sup>.

The performance of nurses in PHC focuses on the treatment, rehabilitation and health promotion of clients, although these professionals have little time for health promotion and disease prevention in the daily care organization. They have a significant and recognized action in home care<sup>(5)</sup>.

The characteristics of the NPE are modifiable factors and can be improved with political-administrative initiatives, namely: training of nurse managers; promote continuity of customer care; increase opportunities for nurses' continuing education and expand opportunities for nurses to participate in organizational decisions<sup>(26)</sup>.

This way, it is urgent and a duty of nursing research to study the NPE in the context of PHC, especially because published studies on the subject are scarce. There is a need to investigate the NPE at other levels of health system care, in addition to the hospital context<sup>(25)</sup>.

Considering that a favorable NPE is essential for the implementation of any health program in PHC and in the follow-up of health policies for that context, promoting the improvement of these environments is essential; it is a public service for citizens, health professionals and organizations.

### OBJECTIVE

To examine the scientific evidence about the NPE in PHC.

### METHODS

This *scoping* review has as *guidelines* the methodology proposed by the Joanna Briggs Institute (JBI) for *scoping* reviews<sup>(27)</sup>. The objective is to examine the scientific evidence about the NPE in PHC. The guiding question is: "How is the nursing care practice environment characterized in PHC?" According to JBI, the *scoping* analysis aim to provide a map of the scope of available evidence; and allow the identification of issues to help promote health and, in this case, evidence-based nursing care, increasing knowledge, identifying gaps and alerting to the need for further systematic reviews<sup>(27)</sup>.

The review question was formulated based on the PCC strategy, in which it was considered: Population (P), nurses; Concept (C), the NPE; Context (C), PHC or community. The types of sources used were quantitative and qualitative studies. Quantitative studies included observational and cross-sectional designs and psychometric validation, while qualitative studies were descriptive, associated with a quantitative design. Systematic literature reviews were meta-syntheses.

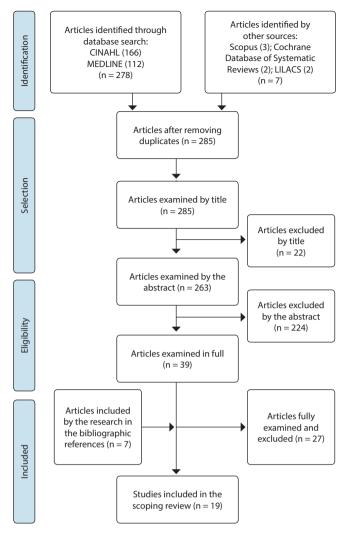


Figura 1 – PRISMA diagram regarding the study selection process

The research strategy aimed to find both published and unpublished studies. Three stages of research were used. The first stage was developed at CINAHL and MEDLINE, with an analysis of the descriptors contained in the titles and abstracts. In the second stage, in a broader search, the same descriptors and search terms were used in the remaining databases of the EBSCOHost platform. In the third stage, new studies were identified by searching the bibliographic references of all included articles. This review was limited to studies published in English, Spanish and Portuguese.

No time limit was defined, since it was intended to cover all the literature that addressed the topic in question<sup>(27)</sup>, due to the scarcity of this theme in the context of PHC. Thus, the articles obtained are limited to the period from 2007 to 2018.

The research was carried out in the following sources: CINAHL; MEDLINE; Scopus, Cochrane Database of Systematic Reviews; LILACS; Scientific Electronic Library Online (SciELO); *"Repositórios Científicos de Acesso Aberto de Portugal"* (RCAAP - Open Access Scientific Repositories of Portugal).

The descriptors initially used in English were: *Nursing Practice Environment* OR *Work Environment* OR *Nursing Practice* OR *Clinical Care Environment* AND *Primary Health Care* OR *Primary Care Settings* OR

Community Health Nursing OR Community Health Centers OR Primary Health Organization. Search terms were considered in the summary.

Full articles were considered for studies that contained the inclusion criteria for this review. In cases of doubt in the analysis of the abstracts, with regards to the relevance of studies, the full article was obtained.

The data were extracted from the articles included in the review, using a table for extracting the results, according to the purpose and question of the review and according to the JBI scoping review methodology<sup>(27)</sup>. The extraction table was organized by the following data: Author(s), Year of publication, Country; Title; Objectives; Study design; Study population/Sample size/Participants; Context; Relevant concept(s) of the review question/Measurement instrument(s); Main results.

Following the guidelines of Levac et al.<sup>(28)</sup>, the data was obtained without disagreement between the reviewers, who did not consider it necessary to contact or ask the primary authors for information/ clarification about the data, according to Arksey and O'Malley<sup>(29)</sup>.

Figure 1 specifies the results of the analysis steps, following the PRISMA model of *Flow Diagram*<sup>(30)</sup>.

### RESULTS

After removing duplicate articles<sup>(30)</sup>, 285 studies were identified for review selection. A total of 46 articles met the inclusion criteria based on the verification of titles and abstracts. Once the full-text articles were obtained, they were then read and examined, so that 19 met the inclusion criteria, of which 16 exclusively in the context of PHC and 3 in a mixed context (PHC and hospital). In the end, this *scoping* review corresponded to the response of 4,383 nurses from the PHC context.

Europe had the largest number of publications, with 47.4%, and included Spain as the country with the highest number of publications, with 36.8%. America was represented only by the United States, with 15.8% of publications. Africa accounted for 21% of publications (South Africa and Nigeria); Oceania (Australia and New Zealand), 10.5%; and Asia, only one study, from China, corresponding to 5.3%.

The quantitative investigation method was adopted by 78.9% of the studies. Systematic literature reviews and 2 meta-syntheses were found and included in this study, totalling 68 studies.

By analyzing the results of the 19 articles, five thematic categories emerged: NPE assessment and job satisfaction; NPE and the recruitment and retention of nurses; The NPE and the results on the clients; Improvement of the NPE; and the NPE and professional development.

### DISCUSSION

The purpose of this *scoping* review is to examine the scientific evidence about NPE in PHC. To answer this question, 17 primary studies were included. Although it was important to include systematic reviews, only two focused on the care context of this review, which are meta-syntheses<sup>(31-32)</sup>. The study of Poghosyan et al.<sup>(31)</sup> proposes a conceptual model to maximize the contributions of PHC nurses and understand how legislation and institutional policies influence, namely, the NPE. The review of Lambrou et al.<sup>(32)</sup>

analyzes the related factors between NPE and job satisfaction in two contexts: PHC and hospital. These literature reviews examined scientific evidence for different purposes, but any mentions about the subject of the present *scoping* review. Thus, we consider the evidence presented in it to be of great worldwide scope.

The NPE should be the primary focus of concern for health systems to prevent crises in two areas: the shortage of nurses and the safety of clients<sup>(10)</sup>. The PES-NWI scale is an instrument that allows researchers to identify the contributions of the NPE to the results of nursing and clients<sup>(9,10)</sup> and produce consistent and comparable evidence<sup>(10)</sup>. As demonstrated by Lake<sup>(10)</sup>, PES-NWI allows to expand reflection and knowledge in all conceptual domains<sup>(10)</sup>. This instrument is also valid to measure the fundamental variables of the NPE in PHC and also allows to evaluate, analyze and reorient the practices of nurses in this context of care<sup>(33)</sup>.

The articles selected for this scoping review used the following measurement instruments: Practice Environment Scale-NWI, in 47.7% of the studies; the scale Nursing Work Index-Revised, in 10.5%; the scale Nurse Practitioner Primary Care Organizational Climate Questionnaire, in 10.5%; the scale Nursing Context Index, in 5.3%; the scale Job Satisfaction Questionnaire, in 5.3%; and the scale Word Health Professions Alliance Scale, in 5.3%. The Practice Environment Scale-NWI remains the most used NPE measurement tool<sup>(10)</sup>.

The APE is the most influential factor and has the greatest impact on nursing outcomes and on the perceptions of the quality of care and client safety. These issues are particularly important in the context of the global crisis that has affected countries in recent years<sup>(32)</sup>.

There are distinctions between the NPE in the hospital context for that of the PHC context<sup>(34)</sup>. Secondly the study of Poghosyan et al.<sup>(34)</sup> is an example of the type of decision making, the relationship between team members and the organizational processes. It is important to reconcile the knowledge of these differences with what those authors<sup>(34)</sup> consider essential in the context of PHC, which is the learning to promote favorable environments on the part of all nurses. It is important that nurses understand the mechanism of action between the NPE and the implications both in the results of organizations and clients, and in the consequences for the professionals themselves.

Nurses occupy a central position in PHC<sup>(35)</sup>, and managers can compare the results of NPE assessments between various health organizations to implement distinct improvements<sup>(9)</sup>.

### Assessment of the Nursing Practice Environment and Professional Satisfaction

Job satisfaction is affected by the NPE, more than any other factor<sup>(32,36)</sup> The NPE consists of the fundamental organizational factor<sup>(36)</sup>, which has a strong impact on the organization's exit intention decisions<sup>(32,34)</sup>. If nurses have support and management support<sup>(19,36)</sup> and greater visibility of their interventions, they are more likely to be more satisfied<sup>(36)</sup>. It is through an NPE favorable to the practice in PHC that there is greater professional satisfaction<sup>(34-35,37-40)</sup>. As for nurse managers, they must have freedom of choice of workplace and must evaluate and manage their workload in order to increase their job satisfaction.<sup>(41)</sup>.

Favorable NPE is important for mobilizing necessary resources quickly, for enabling good multidisciplinary relationships and for

promoting the quality of nursing care<sup>(32,38)</sup>. Nurses consider that there is a good NPE in PHC<sup>(20)</sup>.

# The Nursing Practice Environment and the recruitment and retention of nurses

The existence of favorable NPEs is a major constraint on the ease of recruitment, of the stability of the teams<sup>(39)</sup> and retention of professionals in PHC, aiming to meet conditions for the quality of care<sup>(19,34-35,37,40,42)</sup>. One of the biggest challenges for healthcare organizations is to retain good professionals<sup>(42)</sup>. Another factor that contributes to their recruitment and retention is the improvement of the organizational culture in PHC<sup>(42)</sup>.

The appropriations are also related to the NPE<sup>(32)</sup>. There is an underuse of PHC nurses; if NPEs are improved in this context, professional retention will increase<sup>(31-32,34,40)</sup>. If the NPEs are not improved, there will continue to be high levels of *turnover*<sup>(31,40)</sup>.

# The Environment of Nursing Practice and the results in clients

Policy makers, health and professional organizations have been proposing to redesign the health system in PHC with the aim of increasing citizens' accessibility, improving results with clients and maximizing efficiency<sup>(1)</sup>.

Studying NPEs in PHC provides evidence on how to increase the quality of nursing care<sup>(19,39-40)</sup> and customer safety, how to improve obtaining results<sup>(35,39)</sup> and decrease customer complications<sup>(20,31)</sup>, namely improving disease control and preventing associated risks<sup>(36)</sup>.

### **Improving the Nursing Practice Environment**

There is little knowledge and scientific evidence about NPEs in the context of PHC<sup>(1, 39)</sup>, which can affect the expansion of the profession<sup>(1,19,40,41)</sup>.

NPE is one of the variables with the greatest impact on the quality of care<sup>(36)</sup>. If NPEs are not improved, high levels of stress will continue, *burnout* e *turnover*<sup>(31,40)</sup>. *Burnout* is a consequence of unfavorable NPEs<sup>(32)</sup>.

Multidisciplinary relationships are a predictive factor for a good NPE<sup>(36,38)</sup>. Favorable NPEs have implications for multidisciplinary relationships and the relationship with management/administration to obtain better results<sup>(19,32,40,43)</sup>. It appears that there are good multidisciplinary relationships, but that relations with the management bodies of PHC organizations must be improved<sup>(1,36)</sup>.

New strategies are needed to improve the NPE, which will lead to better quality of care provided, such as the allocation of more nursing human resources<sup>(34,39-40,44)</sup>, resulting in more time for care and more material resources<sup>(38,44)</sup>.

The nurse managers, as they have an important role in improving the NPEs<sup>(19-20,39,42,44)</sup>, face challenges such as providing greater support and management support<sup>(19,39,44-45)</sup> to their teams, with the development of effective leadership styles<sup>(19,39,43-45)</sup>. In addition, they must intervene effectively in improving the NPE due to the concern to obtain results with customers<sup>(20,41)</sup>, improving PHC organizational culture<sup>(42)</sup> as well as the organizational climate<sup>(34,39)</sup>.

Thus, there is a need for health policies aimed at promoting good NPEs in organizations<sup>(32,36)</sup>.

# The Nursing Practice Environment and professional development

The NPE in PHC is positive, despite the shortage of nurses<sup>(20)</sup>. These have little participation in the management processes, which brings difficulties in their professional development<sup>(20)</sup>.

A good NPE favors the autonomous component of the profession<sup>(33-34,39,45)</sup> and it is the best way to keep qualified, committed and motivated nursing teams<sup>(19)</sup>. It also favors the use of the best available knowledge and evidence-based practice<sup>(45-46)</sup>.

In order to develop better NPEs, PHC organizations must provide conditions for the training of nurses, for the acquisition of knowledge and the development of skills in communication, decision making and multidisciplinary collaboration<sup>(35)</sup>. Team cohesion and teamwork is an important factor in the NPE<sup>(19)</sup>, and the culture of in-service training improves the skills of nurses and all health professionals<sup>(19)</sup>.

The promotion of good NPEs must involve not only nurses in practice, but also nurse managers and organizations themselves<sup>(34)</sup> as well as academia and research.

The presence of competent nurse managers in the decisionmaking bodies of organizations will influence the NPE and contribute to the efficiency of organizations<sup>(35)</sup>. The performance of nurse managers is fundamental for the organizational positioning in view of the necessary improvements in theNPE<sup>(35)</sup>.

With all these factors of knowledge about the NPE, nurse managers must take ownership of PHC management<sup>(19)</sup>.

### **Study limitations**

Due to the specificity of the NPE theme and the PHC context as well as the respective scarcity of scientific evidence, a limitation of this study was that there were only two articles from the last two years of the research period, which correspond to 10.5% of the included studies. In relation to the last five years of the research period, the studies included were 63% of the total of the 19 included.

### **Contributions to the field of Nursing**

There is a large knowledge gap about NPE in PHC. This literature review intends to contribute to increase this knowledge in the different areas of nurses' performance: in the provision of care, in management, in research, in teaching and in consulting or advisory services.

## CONCLUSION

This review provides evidence, which is scarce, about the NPE in the context of PHC and provides a service to nurses, nurse managers, academics, researchers and health policy makers, contributing to the improvement of the quality of nursing care - in particular, in the context of PHC.

The NPE is the most influential factor with the greatest impact on nursing outcomes and on the perceptions of the quality of care and client safety.

The NPE in the context of PHC is distinguished from the hospital context by the type of decision making, the relationship

between team members and the organizational processes. Also, for promoting favorable environments that will contribute to increasing results with clients, nurses and organizations.

Important aspects of the NPE are the multidisciplinary relationship between nurses-doctors and nurses-managers-administrators as well as internal communication in organizations, so they should be promoted.

Poor NPEs hinder both the provision of nursing care and the use of all the skills and knowledge that nurses have and hinder the development and acquisition of new skills quickly. They also give rise to job dissatisfaction, difficulties in recruiting good professionals, *burnout* e *turnover*, with harmful consequences for organizations.

Nurse managers contribute strongly to favorable NPEs, need management training and develop these skills to support their teams, leading them, increasing their cohesion and promoting teamwork.

This review showed that the NPE in PHC has the following characteristics: support and management support; nursing leadership; multidisciplinary nurse-physician and nurse-manager-administration relations; results with customers, namely in customer safety; retention of good professionals; and improving the quality of nursing care.

Developing favorable NPEs in the services and in the different PHC units, anywhere in the world, is the best strategy to guarantee the safety of clients and the health of the professionals who care for them. Favorable NPEs are essential to promote excellence in nursing care; they have strong support from nurse managers to their teams; increase job satisfaction, decrease the burnout and turnover; contribute to improving the effectiveness of organizations. In addition, they guarantee a higher level of health, safety and well-being for professionals, with staffing of nurses suited to the needs of clients and the inherent workload. They promote the retention of good nurses; promote motivation through leadership relationships by their managers and leaders, thereby improving productivity and commitment to the organization. Favorable NPEs are more inclusive, generate innovation and intrapreneurship phenomena in organizations. Also, they promote improved service to citizens, improve the care they provide and increase results with customers. Besides, they affect the behavior, performance and results of organizations, teams, nurses and clients.

PHC human capital must increase in quantity and quality, it is essential to know and understand the NPE and how it can be improved. Evidence shows us that there should be investment in promoting favorable NPEs. Otherwise, PHC loses human capital, without which it cannot carry out its mission.

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