

Teaching evidence-based practice: perspectives of university nurse managers**Ensino da prática baseada em evidências: perspectivas de enfermeiros gestores universitários****La enseñanza de la práctica basada en evidencias: perspectivas de enfermeros gestores universitarios****Received: 05/03/2020****Approved: 22/08/2020****Published: 14/04/2021****Fernanda Carolina Camargo¹****Gilberto de Araújo Pereira²****Luan Augusto Alves Garcia³****Marija Antunes⁴****Adriana Oliveira de Freitas Araujo⁵****Álvaro da Silva Santos⁶**

This study aims to understand the teaching of evidence-based practice from the perspective of university nurse managers. It is a study by mixed methods, according to the conception of *Evidence-Based Practice*, and by the *Theory of Diffusion of Innovations*, conducted by semi-structured individual interviews, using a hermeneutic-dialectic approach with the intentional sample of 10 nurse managers from a public university. The teaching of evidence-based practice took place through specific initiatives by teachers, during internships to raise a clinical question and search for evidence to answer it, or in search and critical analysis of scientific articles. The results support the orientation of the educational matrix in the training of nurses and indicate that contextual aspects influencing the adoption of evidence-based practice in teaching were recognized, recommending to increase both teaching and the production of knowledge on the subject.

Descriptors: Evidence-based nursing; Evidence-based practice; Nursing research; Faculty, Nursing; Education, Higher.

O presente estudo tem como objetivo compreender o ensino da prática baseada em evidências na perspectiva de enfermeiros gestores universitários. Trata-se de estudo por métodos mistos, conforme concepção da *Prática Baseada em Evidências*, e pela *Teoria de Difusão de Inovações*, conduzido por entrevistas individuais semiestruturadas, por abordagem hermenêutico-dialética, junto à amostra intencional de 10 enfermeiros gestores de uma universidade pública. O ensino da prática baseada em evidências se dava por iniciativas pontuais de docentes, durante estágios por levantamento de uma questão clínica e busca de evidências para respondê-la, ou em atividades de busca e análise crítica de artigos científicos. Os resultados apoiam a orientação da matriz educacional na formação de enfermeiros e indicam que aspectos contextuais influenciadores da adoção da prática baseada em evidências no ensino foram reconhecidos, recomendando incrementar tanto o ensino, como a produção de conhecimento sobre a temática.

Descritores: Enfermagem baseada em evidências; Prática clínica baseada em evidências; Pesquisa em enfermagem; Docentes de enfermagem; Educação superior.

Este estudio tiene como objetivo comprender la enseñanza de la práctica basada en evidencias desde la perspectiva de enfermeros gestores universitarios. Se trata de un estudio de métodos mixtos, según el concepto de la *Práctica Basada en evidencias* y la *Teoría de la Difusión de Innovaciones*, realizado por medio de entrevistas individuales semiestruturadas, utilizando un enfoque hermenêutico-dialéctico, con una muestra intencional de 10 enfermeros gestores de una universidad pública. La enseñanza de la práctica basada en evidencias se produjo a través de iniciativas específicas de los profesores, durante las fases de análisis de una pregunta clínica y búsqueda de evidencia para responderla, o en actividades de búsqueda y análisis crítico de artículos científicos. Los resultados apoyan la orientación de la matriz educativa en la formación de los enfermeros e indican que los aspectos contextuales que influyen en la adopción de la práctica basada en las evidencias en la enseñanza fueron reconocidos, recomendando incrementar tanto la enseñanza, como la producción de conocimiento sobre el tema.

Descritores: Enfermería basada en la evidencia; Práctica clínica basada en la evidencia; Investigación en enfermería; Docentes de enfermería; Educación superior.

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INTRODUCTION

Global social changes imply the value systems of Nursing as a profession, requiring the adaptation of their skills. New knowledge is required for the practice of Nursing in a dynamic and changing society¹. Nowadays, there is a wide availability of scientific publications. However, its critical use and appropriation in the practical world still presents barriers^{1,2}.

In general, evidence-based practice is the competence given by specific skills to identify and critically analyze relevant scientific publications, with the aim of transforming the knowledge produced, through existing research or conducting new research, into safe information for the nurses' decision-making. It aims to associate evidence with professional expertise and the preferences of people, families and communities assisted by health services².

Changes towards evidence-based practice help nurses to transpose a culture of providing care based on tradition or repetition, to a practice that expands the quality of care, patient safety and cost control^{2,3}. In addition, they require transformational leadership from nurses to engage teams and implement new practices, as well as the ability to plan, evaluate and disseminate changes by incorporating evidence with assisted persons, the scientific community, and policy makers. Also, it is necessary that they have skills to analyze the quality of the available evidence, which requires knowledge about: different research designs, statistical analysis and methods for synthesizing evidence, such as reviews and meta-analysis. The importance of computer skills is added to search for research, indexed journals and databases^{2,3}.

This practice is still especially challenging to Nursing. One of the main difficulties is due to the nurses' individual competence for their performance³. Above all, educating nursing students for evidence-based practice is essential. In view of the primary role that universities have in the review and updating of training, the question arises: *How does the teaching of evidence-based practice occur in the training of nurses?*

From this point, there is a scarcity of studies that reflect on this theme from the perspective of the teacher's work. It has been suggested to undertake research that addresses the difficulties of the teaching staff in teaching this practice, on the existing policies to support this process, especially in the context of Latin America and the Caribbean, where studies on the subject are incipient^{4,5}.

It should be added that in Brazilian public universities, during the performance of professors, at some stage of their careers, university management activities may be assigned to them. Analyzes on the performance in university management, among nursing professors, are recent⁶. When thinking about teaching evidence-based practice and the importance of its dissemination during the training of nurses, addressing this issue from the perspective of university nurse managers is crucial. This is due to the fact that they are institutionalized leaders, capable of inducing changes that increase cooperation between important elements for the teaching of this practice^{4,5}.

The theory of the Diffusion of Innovations has been undertaken to achieve the engagement of leaders and induction of the organizational culture so that it is favorable to the implementation of evidence-based practice, especially by explaining how people adhere to innovations. Distributed on a Gaussian curve, the diffusion of innovations is adequate when innovators (out of the box thinkers), those capable of recognizing the potential for innovation early - make up 2.5% of the contingent^{7,8}.

In sequence, opinion leaders are presented, leaders characterized as people who would encourage others to adopt innovation (stakeholders), making up 13.5%. People who follow the guidelines of these leaders are 34% of the contingent. As a result, the curve comprises a late majority of followers (also 34%). In turn, a contingent of 16% of people has traditional behavior, as they have greater difficulties in adopting changes, adopting them only if they show visible practical results^{7,8}.

According to this theoretical framework, the diffusion of innovation respects four phases: understanding the variables of the social system, regarding the need for change and the incorporation of innovation (Phase 1); persuade about the relative advantages to be achieved by adopting innovation (Phase 2); decide on the adoption or rejection of the innovation (Phase 3); confirm and disseminate the results obtained considering the reorientation of the system through the incorporation of innovation (Phase 4)^{7,8}.

In view of the need to disseminate the teaching of evidence-based practice and the position of nurses first managers as potential stakeholders, the present study aims to understand the teaching of evidence-based practice from the perspective of university nurse managers.

METHODS

It is a study by mixed methods, promoting the understanding of phenomena by linking quantitative and qualitative methods, considering that the understanding of the phenomenon cannot be achieved by only one of these approaches. In mixed methods, it is important to highlight the adoption of a theoretical framework that guides the execution of the study and the analysis of data, which may be implicit, as well as describing the way in which the findings were connected⁹.

For the present study, the sequential exploratory strategy was adopted through the connection of findings, initiated by the qualitative approach that supported the quantitative phase. It begins with a qualitative and contextualized understanding of aspects that require changes in the social system for teaching evidence-based practice. Sequentially, a quantitative analysis that investigated whether there was agreement among participants regarding their perceptions about the variables that made up the social system in view of the needs for change. The theoretical framework of the study is based on the conception of evidence-based practice in Nursing² and the Theory of Diffusion of innovations⁸, with emphasis on Phase 1: knowledge of the variables of the social system in the face of the need for change.

The study scenario was a public higher education institution in the state of Minas Gerais, Brazil, which offers, since 1988, an undergraduate degree in Nursing. In 2020, Nursing training was presented at the following degrees: technical, bachelors, post-graduate *lato sensu* (residency) and *stricto sensu* (Master's and PhD). It is linked to the Brazilian Unified Health System to compose the teaching-service integration scenarios.

The study population was composed of an intentional sample of nurses working in university management activities, considered here as potential leaders for the dissemination of the innovation process: the teaching of evidence-based practice.

The identification of university nurse managers was carried out by means of a previous survey, through an active search, on the institution's website. Those who held the following positions in the institutional autarchy were identified. We included those with a mandate in the management position and who held it in the position of titular, excluding those on leave or vacation at the time of collection.

Data collection took place between August and December 2017, by conducting in-depth semi-structured individual interviews, which were scheduled by previous telephone contact and occurred in an appropriate place in the institution, defined by the nurse manager. They were performed by a trained researcher, lasting approximately 60 minutes.

The interview script consisted of a sociodemographic characterization and matrix on strategies for teaching evidence-based practice in the training of nurses. The organization of the components of this matrix was guided by a detailed integrative review in a recent publication⁵.

The matrix is composed of three dimensions: strategies that mediate the teaching-learning process (five items); strategies provided by information and communication technologies (three items); strategies for reorienting the educational matrix (five items). Each

item is presented by a sentence with a verb in the imperative form about an enabling initiative to teach evidence-based practice for the training of nurses. During the interviews, each item in the matrix was read, and then the university manager nurse was asked to comment freely on how they perceived the strategies contained in the items in the context of the institution. Participants' comments were recorded on the collection instrument.

The production of data was obtained by the qualitative perspective in face of the hermeneutic-dialectical conception, which has valued the power of reflection of the study participants. Thus, from a dialectical relationship between explanation and understanding of a phenomenon under investigation, made possible by reflection from the interaction with the matrix on strategies for teaching evidence-based practice, guiding individual in-depth interviews. With this, through a reflective and contextualized process, we sought to understand the phenomenon analyzed. All discursive practices have potentially generated open possibilities for hermeneutic-dialectic composition for the production of research data, although the participants are conditioned to contexts and commitments¹⁰.

Researchers joint reading of participants comments was carried out, in order to understand the variables of the social system, through a qualitative analysis, regarding the need for changes in the teaching of evidence-based practice - emphasis on Phase 1 of Rogers Theory⁸. The qualitative analysis of the interviews consisted of a unique textual record according to the analysis structure proposed by Minayo¹⁰. We sought to identify, in addition to the semantic structures, the interactions between them and the context, including the sociological structures of message production.

The textual records of the leaders' comments regarding the strategy matrix were transcribed, being highlighted as the group of university nurse managers who, perceive to be the teaching of evidence-based practice, in the investigated context. And, a synthesis is presented through a descriptive report, supporting the understanding of the aspects that require change in the social system.

In order to analyze the existence of agreements between nurse managers on aspects of the local context, social system, on the need for change regarding the teaching of evidence-based practice, the transformation of qualitative data into quantitative data was organized, as proposed by Camargo *et al*¹¹. A spreadsheet was also elaborated, completed by consensus among the researchers of this study after the joint reading of interviews.

Each individual assessment of the items in the strategy matrix, carried out by university nurse managers, received scores regarding the subjective aspects of responses. In the existence of favorable responses to the items, regardless of the frequency of appearance, the responses received a score of 1, and in the absence of negative references or positions regarding any evaluated items, they received a zero score. An agreement ratio was used for each item, based on the calculation [(number of favorable responses/total number of responses) x100]. The averages of the proportions of agreement were analyzed for each of the three dimensions and for the matrix as a whole. The answer was considered favorable to the participant's perception, when the strategy mentioned would be a practice already existing in the investigated university.

Cronbach's alpha ($\alpha = 0.8$) was calculated to estimate the reliability among examiners in order to denote whether the researchers perceived the phenomenon in a similar way. The analytical procedure started from the organization of a database, using the software Statistical Package for the Social Sciences (SPSS) version 21.0.

As for the ethical aspect, CNS Resolution 466/2012¹² was respected, and this research was approved by the Research Ethics Committee of the Universidade Federal do Triângulo Mineiro, on June 9, 2017, under filling No. 2,110,325 and the Presentation Certificate for Ethical Assessment No. 63571517.5.0000.5154. Data were collected after signing the Informed Consent Form by the participants.

RESULTS

In terms of those subject to the study, the following were obtained: coordination of the technical course (n = 1), coordination of the undergraduate course and its departments (n = 3), coordination of *lato* and *stricto sensu* graduate programs (n = 5), working in management positions in the provincial offices (n = 4), thus making a total of 13 nurse managers. The final sample consisted of the participation of 10 university nurse managers, 77% of the intended population.

Those surveyed were characterized by having an average age of 51 years of age, standard deviation of ± 7.9 years. Only one respondent was male, eight participants declared themselves to be white, five in a civil partnership. All of them had university teaching as their main link, with a mean time in higher education of 13.9 years and a median of 14 years. They had a high degree, two of them having a post-doctoral degree while the others had a PhD. In terms of university management, five of them worked in postgraduate coordination, three in graduate coordination and two in the university's autarchy as pro-rectors.

According to the matrix, in view of the dimension of the mediating strategies of the teaching-learning process, participants agreed that 80% of initiatives are developed such as discussing clinical and managerial cases and performing reading, analysis and critical review of scientific articles.

Regarding the elaboration of scripts on the integration of evidence in practice, 50% agreed that this activity has been developed (Table 1). The average percentage of agreement for the dimension was 70%, the highest regarding the development of initiatives in the investigated scenario.

Table 1. Concordance of university nurse managers on teaching evidence-based practice according to strategies that mediate the teaching-learning process. Uberaba, MG, Brazil, 2017.

Mediating strategies of the teaching-learning process ^a	(%) ^b
- Discuss clinical and managerial cases during internships that enable the identification of a clinical question and the search for evidence to answer it	80%
- Carry out activities that contain reading, analysis and critical review of scientific articles with different methodological designs	80%
- Guide the development of skills in writing of scientific articles and oral presentation of research results	70%
- Develop collaborative research and intervention projects between students and nurses in the practice setting	70%
- Develop scripts to guide students on the integration of scientific evidence in care practice	50%

^a Sentences taken from Camargo *et al*⁵

^b Agreement = [(number of favorable responses/total responses) x 100].

As for the strategies provided by Information and Communication Technologies, all participants conceived that there is no organization of collaborative virtual spaces between nursing schools and/or universities. 70% of them agree that there are initiatives related to facilitating access to research for nursing students in the investigated context (Table 2). The average percentage of agreement for the dimension was 43.4%.

Table 2. Concordance of university nurse managers on teaching evidence-based practice according to strategies provided by Information and Communication Technologies. Uberaba, MG, Brazil, 2017.

Strategies provided by Information and Communication Technologies ^a	(%) ^b
- Facilitate nursing students' access to research, using, for example, information resources and databases	70%
- Disseminate research groups and collaborative networks for production of knowledge and innovations to nursing students	60%
- Organize collaborative virtual spaces between nursing schools and/or universities so that they can disseminate innovations, expand the use of evidence-based practice and discuss the difficulties for their teaching	0%

^a Sentences taken from Camargo *et al*⁵ ^b Agreement = [(number of favorable responses / total responses) x 100].

The strategies for guiding the educational matrix were considered to have the lowest frequency of occurrence in the context investigated. All respondents pointed to an absence of convergence between the pedagogical political project and the teaching of evidence-based practice (Table 3). In this perspective, it was the dimension that showed the lowest average agreement regarding the occurrence of the strategies in the investigated scenario (22%).

Table 3. Concordance of university nurse managers on teaching evidence-based practice according to strategies for guiding the educational matrix. Uberaba, MG, Brazil, 2017.

Strategies for guiding the educational matrix ^a	(%) ^b
- Strengthen partnerships between nursing schools/universities and health services	60%
- Train nurse doctors to act as consultants in the development of research, evaluation and incorporation of their results in care practice, in hospitals or other health services	20%
- Integrate into the syllabus topics that address steps for implementing evidence-based practice	20%
- Offer complementary courses or disciplines that give students the opportunity to experience generation and incorporation of research results into practice	10%
- Guide the pedagogical matrix to Advanced Nursing Practice, in order to develop critical judgment, and to stimulate innovations to solve problems, through a collaborative model, of translational sciences and sensitive to sociocultural aspects	0%

^a Sentences taken from Camargo *et al*⁵

^b Agreement = [(number of favorable responses / total responses) x 100].

The total average agreement for the three dimensions was 45.4%. As for reliability, the degree to which different examiners perceive the teaching of evidence-based practice was consistent, with $\alpha = 0.823$.

Regarding the qualitative analysis of the social system, the group of nurse managers perceive that the wide diffusion of information and communication technologies and the economic context requires an innovative and entrepreneurial attitude towards nursing in this context. They recognize that the institution offers the technological infrastructure necessary for EBP to be implemented, with interinstitutional virtual collaboration spaces non-existent. They also point out the need for changes in the pedagogical political projects of the courses, training of professors and realize that there are initiatives by the institution and the professors themselves in the implementation of EBP, as detailed in Chart 1.

Chart 1. Perspectives of university nurse managers on teaching evidence-based practice. Uberaba, MG, Brazil, 2017.

Participants understand that didactic strategies need to be innovated, including methods corresponding to the contemporary context, with innovations such as the internet, quick access to articles and databases (even via mobile phone) and behavioral specificities of the new generation of students. They discussed that current challenges require nurses to be able to innovate and take action, control costs and have an environmentally sustainable practice. So, the consensus is that it is necessary to reinvent the classroom and disciplines, rethink teaching strategies. They inform that the university has a good computer structure for teaching, providing laboratories, but the institution has not yet thought of collaborative virtual spaces for evidence-based practice. However, the institution provides broad access, for the entire academic community, to important bases in the generation of evidence, such as Cochrane, in addition to having the service of specialized librarians to guide the search and use of scientific databases. They report that similar approaches are initiatives that are already induced in undergraduate courses, in disciplines such as computer science in nursing or health research. They point out that it is mandatory to conclude the course work to obtain a Bachelor's degree in Nursing, which is the result of research, but that this monitoring can be improved in order to also be a space for teaching evidence-based practice. With that, they understand that research has been an aspect induced by the institution since graduation, including participation in research projects and provision of grants such as scientific initiation grants. However, they reflect that better guidance is needed with professors and researchers so that there is also an opportunity to experiment with evidence-based practice. They mention that there is a distance between the research groups and the classroom space. Although professors are leaders of research groups at the institution, they do not observe consistent action, there is no direct aggregation of these groups with disciplines taught. They emphasize that in Brazil there is an electronic website in the public domain maintained by the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) in which researchers and research groups can be identified, but this access to searches needs to be better disseminated among students. They perceive that it is necessary and urgent to train nurses as consultants and mentors for the (des)incorporation of evidence and technologies in health services. They report that the institution's graduate programs have turned to training professors, researchers or specialists, and it is crucial to increase this discussion in graduate studies. They mention that there are initiatives with this convergence that are left to few teachers and in isolation. Above all, they perceive the need to adapt the pedagogical political project for the training of nurses at different levels, considering the teaching of evidence-based practice. They report that, in most cases, the professor brings with them a teaching perspective, which is based on the compartmentalization of knowledge and the reproduction of specific content. They emphasize the need to review professor training as well. For that, it would be crucial to mobilize these professors for evidence-based practice, better qualifying them on the topic, placing this as an agenda for discussion with the didactic departments, being the steps to achieve revision of the pedagogical political project, for the construction of a new teaching matrix. Despite conceiving the induction of this process as an attribution of the autarchy, they emphasize that it must be a process of collective engagement of the professors. Another aspect in common mentioned was the fact that participating in the interview ended up motivating them to think about the theme and increased their interest in the matrix items, initiatives proposed there.

DISCUSSION

The results present the perspective of a group of university nurse managers immersed in the context of an institution. They have noticed that the teaching of evidence-based practice is carried out in specific initiatives, resorting to the mediating strategies of the teaching-learning process, but without the institutional guidance of the pedagogical political project. Above all, they pointed out that it is necessary to engage with the faculty to overcome this reality and implement innovations. It can be observed that the scenario has initiatives focused on the production and consumption of research, since graduation. However, there are gaps, which include: teaching strategies, content, disciplines, integration with practice scenarios, teacher training, pedagogical matrix and supporting institutional policy.

In consonance with the results of the present study, a documentary research identified that there is a movement for change in the training of Brazilian nurses; but to overcome the challenges of curricular change and implement the new in the training of nurses, it is necessary to reduce resistance to changes, by proposing reflections on teaching, seeking strategies that lead to reducing the distance from health services, with the reinforcement of the classic dichotomy between thinking and doing, and overcoming fragmentation and technicality, present in a good part of the practice of professors¹³. It is argued that the nursing syllabi are

based on the hospital-centered medical model for training, and it is necessary to invest in training based on critical thinking in different care contexts^{13,14}.

Especially, nursing education must envision more than the technical-scientific preparation of professionals. It should aim to educate social political subjects capable of acting responsibly and transforming reality, especially in reducing inequalities such as the lack of access to the health system by a good part of the population¹⁴.

Evidence-based practice is a crucial element for training guided by critical and fundamental thinking in today's complex healthcare settings. In this sense, there has been an increasing investment in models and frameworks that can guide the teaching of evidence-based practice¹⁵⁻¹⁷. However, only when the academic body (researchers and professors) is well prepared, with positive skills and attitudes, does it actually incorporate evidence-based practice in its teaching and support students' learning^{15,16}.

The scientific production on plans to implement measures in the syllabi to enable nursing students to apply evidence-based practice still has gaps¹⁵⁻¹⁷. Critics point out that simply teaching about research is not enough to ensure that learning translates into practice. Although more nurses than ever before are considered academically qualified and knowledgeable in research theory, this does not guarantee the transfer of these skills and knowledge to practice¹⁷.

In Colombia, nursing professors and researchers at the Universidade de Medellín identified several barriers to evidence-based practice such as: lack of incentives for nurses to get involved in research; limited availability of nursing evidence; and lack of communication between practice and academy environments. Research partnerships between universities and clinical institutions were identified as the main facilitator¹⁸.

Another aspect, university management carried out by nurse professors, refers to a set of individual and collective actions, belonging to a social space in which specific, singular and complex groups are articulated. In a great deal, the product of all the efforts expended by nurse managers aims at achieving a quality university education for the excellence of future nurses¹⁹.

From this perspective, innovations, such as evidence-based practice, play an important role in organizations - even in universities, when they indicate internal opportunities that benefit their development in a sustainable way, and generate benefits or responses that can meet the needs of the specific context²⁰.

With this, the present study allowed, in the context of the dissemination of evidence-based practice as an innovation for teaching, an analysis to understand the conditions that permeate its implementation. University nurse managers, as institutional leaders, have a role to play in identifying needs in the context, in order to support resolutions and expand cooperation for the implementation of innovation. Still, it is inferred that the act of participating in studies on the theme can induce university nursing managers to reflect on the engagement favorable to the implementation of evidence-based practice.

In line with the provisions for Phase 1 of Rogers's Theory⁸, the hermeneutical dialectical interactions undertaken by declared recognition of the contextual aspects that influence the university's social system regarding the adoption of teaching of evidence-based practice in the training of nurses. Variables were identified in the study as drivers for the process of change towards the teaching-learning process based on evidence-based practices, especially regarding the strengthening of strategies to guide the educational matrix and the strategies provided by Information and Communication Technologies.

CONCLUSION

Evidence-based practice has been presented as a challenge for nurses worldwide. The results increase the production of knowledge on the subject, which is still insufficient for Latin America and the Caribbean, presenting the perspective of nurse university managers of a public higher education institution in Brazil.

The hermeneutic-dialectic approach undertaken, guided by the matrix on strategies for teaching evidence-based practice, allowed for the recognition of aspects that condition the context of this practice in the investigated institution. The answers showed consistent agreement between the interviewees ($\alpha = 0.823$).

The existence of initiatives that address the political educational project and the organization of collaborative virtual spaces to disseminate the use of evidence-based practice was more limited in the institution, and its teaching is usually undertaken in the context investigated by specific initiatives by professors, during clinical internships that enable the identification of a clinical question and the search for evidence to answer it, or even in activities that include the critical review of scientific articles.

As limitations of this research, the methodology used prevents generalizations when considering the quantitative stage of the study. However, the interviewees made up almost the entire group of interest, and the interactions during the interviews provided access to contextual meanings, allowing the observance of aspects that condition the implementation of evidence-based practice in teaching, which, through the discussion of the results, potentially correspond to similar scenarios. However, the matrix used to guide the interviews in this study presents itself as a tool to guide diagnoses with nurse university managers from other locations.

As for the implications for the practice, at the individual level, for the research participants, the reflections that emerged ended up motivating them to think about the theme and broaden the interest on initiatives proposed in the matrix, having a positive repercussion. In addition, the results can guide the formulation of local policies and the reorientation of the educational matrix in the training of nurses.

New research can be undertaken with nurse managers from other university institutions, by replicating this method, in order to support local diagnoses, therefore, the implementation of Evidence-Based Practice in the training of nurses.

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CONTRIBUTIONS

Fernanda Carolina Camargo participated in the design, data analysis, writing and reviewing. **Gilberto de Araújo Pereira** worked on the design and reviewing. **Luan Augusto Alves Garcia** contributed to the writing and reviewing. **Marija Antunes** participated in the data collection and analysis. **Adriana Oliveira de Freitas Araujo** and **Álvaro da Silva Santos** contributed to reviewing.

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