Teaching strategies used in the training of the nurse-educator: an integrative review

Estratégias de ensino utilizadas na formação do enfermeiro-educador: revisão integrativa

How to cite this article:
Cecilio SG, Gomes ATL, Goulart CE, Vieira LG, Gazzinelli MF. Teaching strategies used in the training of the nurse-educator: an integrative review. Rev Rene. 2021;22:e61210. DOI: https://doi.org/10.15253/2175-6783.20212261210

ABSTRACT
Objective: to investigate which teaching strategies are used in the training of the nurse-educator in nursing undergraduate courses at a national and international level. Methods: an integrative review carried out in the databases Latin American and Caribbean Health Sciences Literature, Current Index to Nursing and Allied Health Literature, National Center for Biotechnology Information, Web of Science, SCOPUS. No time limits were determined. Results: Based on the seven selected articles, different teaching strategies used in the training of nurse-educators in Nursing courses were identified in countries such as Brazil, United States of America, United Kingdom, Spain and Germany. The strategies identified were: Digital Teaching Materials, Role Playing Game, Problematization, Poetry, Practical Experience, Educational Games and Educational Action Formulation and Development. Conclusion: the strategies identified relate to the Modern-Traditional and Modern-Dialógico benchmarks, with little or no openness to sensitive, ethical-aesthetic-political experimentation in the fields of action that relate to Health Education.

Descriptors: Education, Nursing; Health Education; Teaching Materials; Education, Higher.

RESUMO
Objetivo: investigar as estratégias de ensino utilizadas na formação do enfermeiro-educador nos cursos de graduação em enfermagem em âmbito nacional e internacional. Métodos: revisão integrativa realizada nas bases Literatura Latino-Americana e do Caribe em Ciências da Saúde, Current Index to Nursing and Allied Health Literature, National Center for Biotechnology Information, Web of Science, SCOPUS. Não foram determinados os limites temporais. Resultados: com base nos sete artigos selecionados, identificaram-se diferentes estratégias de ensino utilizadas na formação de enfermeiros-educadores nos cursos de Enfermagem em países como o Brasil, Estados Unidos da América, Reino Unido, Espanha e Alemanha. As estratégias identificadas foram: Materiais Didáticos Digitais, Role Playing Game, Problematização, Poesia, Experiência Prática, Jogos Educativos e Formulação e Desenvolvimento de Ação Educativa. Conclusão: as estratégias identificadas relacionam-se com os referenciais Moderno-Tradicional e Moderno-Dialógico, com pouca ou nenhuma abertura à experimentação sensível, ética-aesthetic-política nos campos de ação que se relacionam com a Educação em Saúde.

Descritores: Educação em Enfermagem; Educação em Saúde; Materiais de Ensino; Educação Superior.
Introduction

Nursing is a field of knowledge and practices that, supported by the development of a caring relationship between professionals and users, acts in a health and social welfare perspective\(^1\)\(^-\)\(^2\). The role fulfilled by the professional nurse is linked to interpersonal and educational relationships, either individually with the patient, or with the family and the public in general\(^2\)\(^-\)\(^3\).

The curricular guidelines for the Nursing course have a training that values a professional capable of acting in the development of prevention, promotion, protection and health rehabilitation actions. In the meantime, it is hoped that the egress may act in a perspective that transcends the basic precepts of care and reaches the transforming potential of the profession: that of educating - thus becoming a nurse-educator\(^4\). It is understood how to educate in health the political and pedagogical process of socialization of knowledge and training of critical subjects, capable of taking care of themselves, their family and their social body\(^5\).

Despite the understanding of health education and the purposes of the guidelines, it is observed that, in practice, nurses tend to operate health education based on a hegemonic reasoning of accountability and domination by the body of others, the choices and control of the sick subjects. There is a predominance of practices based on the transmission of knowledge and imposition of behaviors considered adequate from the point of view of health care\(^5\)\(^-\)\(^8\).

The role of teachers and higher education institutions as mediators of a nursing education that is not intended to reproduce hegemonic thinking in health education and, in the meantime, contribute to the training of a professional committed to the sense of health education anchored in subjectivity and the valorization of the production of life is reflected in this aspect\(^8\).

Such situations therefore require questions and reflections on the training of the nurse-educator, since this process establishes similarities with future professional practice and involves a complex system that comprises different teaching strategies, approaches, methodologies and theoretical references of education. Teaching strategy means the path adopted by the teacher in the development of the teaching-learning process in the educational act\(^9\)\(^-\)\(^10\).

It is believed that questions and reflections on the training of the nurse-educator can be driven by critical analysis of literature through an integrative review, seeking to investigate what teaching strategies are used by teachers in the training of the nurse-educator and how these currently happen in nursing courses. Based on the fact that education is a phenomenon whose understanding is given by an articulated whole of concepts and not a set of independent concepts, when identifying the teaching strategies, it also becomes possible to explain the theoretical basis chosen by the author/teacher, while the choice of strategy signals to this end.

When considering the teaching strategies used in the training of the nurse-educator, it will be possible to reflect on whether they have contributed to training future nurses who consider the subjectivity and autonomy of the individual, or whether they have remained stuck in a sense that considers autonomy as a normalizing device, little inclined to singularity. Furthermore, understanding these strategies may not only point out possible critical knots of nurse-educator training, but also encourage reflection on what can be replicated by other teachers in other higher education institutions.

This study aimed, therefore, to investigate what are the teaching strategies used in the training of nurse-educator in undergraduate nursing courses at national and international level.

Methods

It is an integrative review of the literature\(^11\)\(^-\)\(^12\) conducted through the following steps: i) estab-
Establishment of the research hypothesis or question; ii) process of search and determination of criteria and extraction of information; iii) evaluation of studies, interpretation of results and presentation of the knowledge synthesis review. To guide the integrative revision, the following research question was formulated: Which are the teaching strategies used in the training of the nurse-educator in the Brazilian and international nursing graduation courses?

The databases consulted were: Latin American and Caribbean Health Sciences Literature (LILACS), Current Index to Nursing and Allied Health Literature, National Center for Biotechnology Information (CINAHL), Web of Science (WoS), SCOPUS. The controlled descriptors were extracted from Medical Subject Headings (MeSH) and Health Descriptors (DeCS), in English and Portuguese, respectively: Education, Nursing/Education in Nursing (#1); Health Education/Education in Health (#2); Education, Higher/Education in Higher Education (#3); Nursing/Education in Nursing (#4); Teaching Materials/Materials (#5); and methods/methods (#6). To develop the search strategy, the association between Boolean operators OR and AND was used: 1st strategy: #1 AND #2 AND #3 AND #4 AND #5 AND #6; 2nd strategy: #1 AND #2 AND #5; 3rd strategy: #1 AND #5 AND #6; 4th strategy: #3 AND #4 AND #5 AND #6; 5th strategy: #1 AND #3 AND #5 AND #6; 6th strategy: (#1 OR #4) AND #3 AND #5 AND #6.

The inclusion criteria adopted were articles published in full in national and international online databases, which portrayed what teaching strategies are used in the training of nurse educators in nursing courses. The time limit was not defined. For those articles that were not available in the full version in the databases, a manual search was made in the journals where they were published and/or direct contact with the authors. The exclusion criteria were articles derived from secondary data, such as revision and/or duplicates in databases.

Two authors and reviewers independently evaluated the title and abstract of all studies to identify those that met the inclusion criteria. The rejection of an article during the initial screening occurred when the reviewers, based on the title or abstract, or both, understood that it did not meet the inclusion criteria. In situations of disagreement among the reviewers, the participation of a third party was chosen. The articles, to be included, needed to explicitly address that they were intended to describe a teaching strategy aimed at training a nurse who educates. The understanding that the strategies were intended for the training of a nurse educator happened when the studies explained that the teaching strategy was linked to interpersonal and educational relationships, either individually with the patient, with the family or with the public in general, with the final objective of contributing to the training of a nurse capable of educating.

The selected articles, after alignment of the reviewers, were evaluated in full text. The exclusion of texts after full reading occurred in those situations where the articles did not describe the teaching strategy used; they only cited it in a punctual manner.

The synthesis stage of the selected articles relied on the performance of the principal researcher alone, as a way to ensure the accuracy of the analysis. The extraction of the data from the final sample was performed through a collection tool developed for the purpose of this study. The variables collected and analyzed were: a) general characteristics: title of the article; year of publication, country in which the study was developed, general objective; b) specific information: area/discipline in which the teaching strategy was developed; type of study; methodological approach of the study, level of evidence, teaching strategy used and the way it was applied in the teaching directed to the nurse-educator. The data were summarized and presented in a synoptic table.

As for the evaluation of the studies, according to the level of evidence, the classification was adopted according to the analyses of the Collaborating Centre of the Joanna Briggs Institute. The studies were eval-
uated as follows: Level I - Evidence obtained through systematic review of randomized controlled trials; Level II - Evidence obtained based on a randomized controlled trial; Level III.1 - Evidence obtained from well-linear controlled trials, without randomization; Level III.2 - Evidence obtained from well-linear or case-control cohort studies; Level III.3 - Evidence gained from multiple time series, with or without intervention and dramatic results in uncontrolled trials from and Level IV - Reports from respected authorities, based on clinical criteria and experience, descriptive studies or expert committee reports.(13)

The methodological path for the final sample (seven articles) of this study is summarized in Figure 1.

Results

Seven articles were included in the final sample of the on-screen integrative review, which describe the application of teaching strategies used for the training of nurse educators in Brazil and internationally. To facilitate the presentation and discussion of the results, each study included in the final sample was coded as follows: letter E (=Study) followed by the Arabic numerals (1, 2, 3... 7), in order, so that the first study received the code E1, the second E2, and so on, until E7. The countries that hosted the studies were: United Kingdom, Brazil, United States and Canada. The publication date of the articles was 2004 and 2018, being all of the descriptive type, framed in the level of evidence 4 and with qualitative methodological approach.

Figure 2 presents the characterization of the analyzed articles based on the following variables: article code; name of the teaching strategy for nurse-educator training; description of the teaching strategy in a summarized form; and development of the teaching strategy.

The studies addressed seven distinct teaching strategies that were grouped into three different Health Education benchmarks (Figure 3): 1) Traditional (Digital Teaching Materials; Educational Action Formulation and Development; Educational Games); 2) Dialogical (Problematization; Role Playing Game; Practical Experience); 3) Aesthetics (Poetry).
### Description of the teaching strategy

| Name of teaching strategy and year | Description of the teaching strategy | Development of the teaching strategy |
|-----------------------------------|--------------------------------------|--------------------------------------|
| E1- Poetry (14) (2006)            | Teaching approach in which, through poetry, students give meaning to events in the practical field, in addition to developing creativity - a means to express the art of nursing care. | Creating free-form poems on Home Care and collectively building meaning on the role of the nurse as educator and caregiver in the home environment. |
| E2- Practical experience (praxis experience) (15) (2006) | A teaching approach in which students formulate and experience an education and health situation (experience) and reflect on it. | Development of a brief health education situation with a free theme, which is recorded on video in the classroom and viewed independently (self-evaluation) and collectively by each student. |
| E3- Formulation and development of educational action (16) (2011) | Teaching approach in which students formulate and develop practices/care that address the needs of others in their own universe. | Development of an educational action focused on Social Pediatrics in a daycare center with children aged three to four years old through the playful puppet theater resource within the oral health theme. |
| E4- Role Playing Game (RPG) (17) (2016) | A metaphorical representation game that refers to a cooperative activity in which a group of players, guided by a master (narrator), creates and stages a story in oral, written or animated form. | Creation of a character to experience problem situations that portrayed the reality of the nurse in the main practice scenarios, among them, health education. |
| E5- Problematization (18) (2016) | Teaching-Learning approach that allows the student to be an agent of social transformation by identifying real problems and seeking original and creative solutions. | Identifying the problems of the indigenous population and formulating hypotheses for health education for this segment of the population. |
| E6- Educational games (19) (2017) | Technology and instructional method to favor the development of cognitive functioning, psychomotor skills and affective behavior, considering social interaction. | Fixation of health education concepts through six different games, dominoes, pass or pass, bingo, game of the old, darts and memory game. |
| E7 - Digital teaching materials (E-learning) (20) (2018) | Non-presential teaching supported in Information and Communication. | Construction of digital materials such as videos and texts on environmental sustainability and health, with scientific information on the needs for changes in population habits. |

**Figure 2** – Characterization of the studies included in the final sample. Belo Horizonte, MG, Brazil, 2020

| Teaching strategy | Theoretical reference | Transposing the approach in the study |
|-------------------|-----------------------|--------------------------------------|
| E1- Poetry        | Aesthetics            | Education that relies on art and aesthetics to promote experimentation and the production of new ways of thinking and feeling care in Home Care. |
| E2- Practical experience | Dialogic            | Education based on the dialogue between teacher-student and pupil-student, in search of proposals for the modification of reality based on the immersion of students in a hypothetical situation of health education. |
| E3- Formulation and development of educational action | Traditional | Directive education on the transmission of scientific content related to Oral Health through the development of educational practices with the use of puppet theater to fix content. |
| E4- Role Playing Game | Dialogic            | Non directive education, based on dialogue, problematization and anchored in subjectivity. |
| E5- Problematization | Dialogic            | Education based on dialogue and the search for collective proposals for the modification of health reality, based on the immersion of students in the context of the indigenous population. |
| E6- Educational games | Traditional          | Directive education based on the transmission of scientific content related to Health Education and transmitted through games. The learning takes place through the fixation of content provided by the situations presented in the game. |
| E7 - Digital teaching materials | Traditional          | Directive education based on the transmission of scientific information. The learning takes place through the contact with the information, in virtual format. |

**Figure 3** – Theoretical approaches to health education according to teaching strategies. Belo Horizonte, MG, Brazil, 2020
Discussion

As limitations of this study, it is pointed out that some studies included in the review do not detail the description of the teaching strategies chosen by the teachers, such as the time of contact with students in the teaching-learning process, the number of teachers involved in the planning of the strategies, as well as the theoretical reference used. These studies made it difficult to synopse the teaching strategies and, furthermore, it is believed that they may harm their reproduction by the academic community. It is suggested that new field research on nurse-educator training be carried out as a way of mapping out the subjects and their teaching strategies, considering the above elements.

The systematic search in the main databases in the health area allowed the identification of seven different teaching strategies used by teachers in the training of nurse-educators in Nursing courses in countries like Brazil, United States of America, United Kingdom, Spain and Germany: Poetry (E1), Practical Experience (E2), Formulation and Development of Educational Action (E3), Role Playing Game (E4), Problematization (E5), Educational Games (E6) and Digital Teaching Materials (E7).

There are different ways of operating health education that are based on different conceptions of knowledge, health, education and subject. The way in which the nurse-educator operates health education is mostly related to the choice of the theoretical framework, which, in turn, is presented through different aspects, varying from traditional to postmodern approaches/methods.[21-22]

Among the seven teaching strategies used for the training of the nurse-educator identified in this review, the one concerning Digital Didactic Materials relates to the Modern-Traditional. Among the justifications, it is worth mentioning the fact that this strategy, despite presenting a technological innovation (E-learning), is based on the method of transmission of contents for nursing students. The focus of the authors was to train the students on Environmental Education and prepare them to educate, as professionals, the population assisted by them. They present, as a way to operate health education, the use of didactic materials of informative nature (built for the group and not with the group) that do not provoke reflection in the population of destination or arouse the problem. Therefore, both actors involved in the process, students and population are potentially stimulated to reproduce the pattern of passive assimilation of knowledge, respecting the existing hierarchy between who should educate and who should learn.

Two other teaching strategies related to the Modern-Traditional aspect were the Educational Games and the Formulation and Development of Educational Action. The Educational Games were used as audiovisual didactic resources to acquire educational purpose, contemplating the contents taught in the subject Education in Health. The authors of the study discuss that the use of this strategy presents potential to make the student “more skilled, competent and capable” in his/her role as a health educator.

However, what is observed in the analysis of the text is the simple act of using a pedagogical and playful teaching strategy to transmit knowledge to students and not build it together. No passages were observed in the results that reflected problem solving situations or the critical thinking of the students. As an example, when the authors report that the bingo game was used to “better fix the content” on Alma-Ata, the Ottawa Charter or the Adelaide Charter, only the reproduction of the scientific discourse by the students
is foreseen. Or, still, when they declare that the darts game was built to help in the "fixation of the content" on the theoretical Paulo Freire.

The same was observed in the strategy Formulation and Development of Educational Action. The authors bring in their considerations that the strategy of allowing the elaboration and development of an educational action in a practical field could mean the abandonment of the passive condition coming from the bank learning. Creating and implementing an educational intervention, depending on the degree of student involvement in the process may constitute an experience in which there is production of new senses for Education. However, when students formulate an educational action based on the transmission of knowledge, it is necessary to reflect on the extent to which future nurses-educators have been provoked to think, in order to break with the standards of the Modern-Traditional method, in which the role of the educator is to provide the apprehension of theoretical content in a vertical manner.

The students in this situation chose to use the Puppet Theater approach, to permeate the "content assimilation" of children (target audience of the intervention). The authors of the study argue that the Puppet Theater facilitates the assimilation of knowledge that is desired to be transmitted, leading the audience to consequent reflection. This reflection, according to the authors, is necessary to obtain changes in the behavior of the population.

In the situations observed above, health education can be understood as a reproduction tool of hegemonic knowledge that denies affection, disregards singularities and the different ways of living and producing health in society. Although the strategies Digital Didactic Materials, Educational Games and Formulation and Development of Educational Action have sought to innovate, they have ended up leaning on the mechanical use of problematizing practices, which, in summary, encouraged the passive reproduction of knowledge among teachers, students and the context studied. Role Playing Game strategies, Problematization and Practical Experience are related to the Modern-DIALOGICAL aspect.

In the Modern-DIALOGICAL method, education is considered an instrument capable of promoting the autonomy of the participants while inviting them to read the world based on critical, reflective and problematizing thinking that tends to consider the different subjectivities. In this situation, both educators are producers of knowledge.

The Role Playing Game, Problematization and Practical Experience strategies fit into the perspective described above by providing students with reflection based on sharing experiences and building new knowledge.

Role Playing Game (RPG) was a teaching strategy that allowed the student to experience situations similar to the practice of the trained nurse and, with this, experience skills such as autonomy and teamwork, as well as developing creativity and sensitivity. This refers to the specific characteristics of the game in question, since each player was able to conduct the game as he or she preferred, thus finding himself or herself in a position to obstruct the monotony and determinism found in other educational games.

In the Problematization strategy, the students observed, for a determined time, the health production practices of a portion of the indigenous population and, based on this, they were motivated to list problems and develop an intervention to transform the reality. This process placed the students in a central position in the development of educational practice, which valued the constitution of a critical and reflective thinking.

Regarding the Practical Experience, the students problematized, according to the situations created, aspects related to their training as health educators, based on the exchange of knowledge and experiences among their peers and teachers. The concept of practical experience (or praxis experience) requires that students actively participate in the learning experiences, having time to reflect on its mea-
ning. In addition, they need to assimilate the new knowledge constructed and develop a critical awareness of the relationship between the new knowledge and their nursing practice.

Finally, the Poetry strategy was the only one related to the Postmodern method, because, as the author of the text brings, the task developed offered the students a free expressive arena to reflect on their experiences and learn from them; to produce meanings; and to contribute to the construction of the affective domain of the students as nurses who care and educate. This is the post-modern or post-structuralism reference, whose assumptions escape the dominant logics of health education and come close to the perceptions, sensations and affections experienced in the meeting between educator and student(21,23).

The integrative review carried out contributes to sustaining the reflection that, in the formative processes of the nurse as educator, the Modern-Traditional and Modern-DIALOGICAL methods of health education are predominant. Although some of the strategies studied were based on the dialogical perspective, in general, they contributed to the training of a nurse-educator focused on the constitution of practices that favor the control of subjectivity and, also, with the predominance of programmed actions without openness to other ways of being, knowing, feeling or experiencing the production of health(23).

Although we have made progress on the Curriculum Guidelines, we are linked to the teaching of a health education that respects norms, standards and uncreative guidelines. At both national and international levels, little is invested in curricular forms that allow the student to learn about human and social issues in a sensitive and experiential meeting. “Without changes that are present in the body of those who operate them, we coat old practices with new words, when we need, effectively, practices that search old words, giving them new strength and meaning”(24:192).

Based on the review, it is launched the desire that the training in nursing starts to operate through an opening to sensitive experimentation, ethical-aesthetic-political in the fields of action that relate to the formative processes of the nurse-educator. It is believed that, in practical terms, this can happen through optional or obligatory disciplines in the pedagogical projects of the Nursing courses. What we cannot but question is to what extent we have made an academic project more flexible so that the student has the chance to graduate as a nurse-educator and acquire, during his or her academic trajectory, in addition to the technical-scientific knowledge, that is, acquire the power to escape the traditional and predictable patterns(24).

If the evidence points out that the current training is focused on executing professionals who continue educating according to the transmission of information, it is because we are reproducing something experienced by us. We need to find other inspirations to think about education. It is necessary to escape from closed, teleological, positivist, sovereign or substantial conceptions. Education and health education need to be seen as a continuous process that produces useful knowledge, capable of modifying the subject.

Conclusion

The strategies identified as: Digital Didactic Materials; Role Playing Game; Problematization; Poetry; Practical Experience; Educational Games and Formulation; and Development of Educational Action relate to the Modern-Traditional and Modern-DIALOGICAL methods, with little or no openness to sensitive experimentation, ethical-aesthetic-political in the fields of action that relate, in turn, to Health Education.

Collaborations

Cecilio SG, Gomes ATL, Goulart CF, Vieira LG and Gazzinelli MF contributed to the conception and design, analysis and interpretation of the data, writing of the article, relevant critical review of the intellectual content and final approval of the version to be published.
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