Integrative Review
doi: https://doi.org/10.1590/1983-1447.2019.20180031

Resources and competencies for management of educational practices by nurses: integrative review

Revista Gaúcha de Enfermagem

Recursos e competências para gestão de práticas educativas por enfermeiros: revisão integrativa

Recursos y competencias para la gestión de prácticas educativas por enfermeros: revisión integradora

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How to cite this article:
Koerich C, Lanzoni GMM, Coimbra R, Tavares KS, Erdmann AL. Resources and competences for management of educational practices by nurses: integrative review. Rev Gaúcha Enferm. 2019;40:e20180031. doi: https://doi.org/10.1590/1983-1447.2019.20180031.

ABSTRACT

Objective: To know the resources used and the necessary skills to the nurse for the management of educational practices in health services.
Method: This is an integrative literature review, carried out in the Latin American and Caribbean databases on Health Sciences Information (BIREME), PubMed Central (PMC), Scopus and Web of Science (WoS). After analysis resulted in 18 studies, published between the period 2011 to 2017, which were presented in three categories.
Results: The results were presented in the categories: instrumental resources used in health education, technological resources applied to educational practices and competencies for management of educational practices.
Conclusion: This study brings as a contribution to the practice of nurses subsidies for the development of management of educational practices in health services through technological and instrumental resources and professional skills that aim at team development, user autonomy and institutional growth.
Keywords: Education. Health education. Nursing. Nursing, supervisory. Leadership. Health management.

RESUMO

Objetivo: Conhecer os recursos utilizados e as competências necessárias ao enfermeiro para a gestão das práticas educativas nos serviços de saúde.
Método: Trata-se de uma revisão integrativa de literatura, realizada nas bases de dados Latino-Americano e do Caribe de Informação em Ciências da Saúde (BIREME), PubMed Central (PMC), Scopus e Web of Science (WoS), a qual após análise resultou em 18 estudos, publicados entre o período de 2011 a 2017, que foram apresentados em três categorias.
Resultados: Os resultados foram apresentados nas categorias: recursos instrumentais utilizados na educação em saúde, recursos tecnológicos aplicados às práticas educativas, e competências para gestão das práticas educativas.
Conclusão: Este estudo traz como contribuição para a prática do enfermeiro subsídios para o desenvolvimento da gestão das práticas educativas nos serviços de saúde por meio de recursos tecnológicos e instrumentais e de competências profissionais que visam o desenvolvimento da equipe, autonomia do usuário e crescimento institucional.
Palavras-chave: Educação. Educação em saúde. Enfermagem. Supervisão de enfermagem. Liderança. Gestão em saúde.

RESUMEN

Objetivo: Conocer los recursos utilizados y las competencias necesarias al enfermero para la gestión de prácticas educativas en los servicios de salud.
Método: Se trata de una revisión integradora de literatura, realizada en las bases de datos Latinoamericano y del Caribe de Información en Ciencias de la Salud (BIREME), PubMed Central (PMC), Scopus y Web of Science (WoS). Luego del análisis se obtuvieron 18 estudios publicados entre el período de 2011 y 2017, que se presentaron en tres categorías.
Resultados: Los resultados se presentaron en las categorías: recursos instrumentales utilizados en la educación en salud, recursos tecnológicos aplicados a las prácticas educativas, y competencias para la gestión de las prácticas educativas.
Conclusión: Este estudio trae como contribución a la práctica del enfermero subsidios para el desarrollo de la gestión de las prácticas educativas en los servicios de salud, a través de recursos tecnológicos e instrumentales y de competencias profesionales que apuntan al desarrollo del equipo, a una autonomía del usuario y al crecimiento institucional.
Palabras clave: Educación. Educación en salud. Enfermería. Supervisión de enfermería. Liderazgo. Gestión en salud.

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INTRODUCTION

As access to health services increases, new health care strategies need to evolve through education, research and clinical practice[1]. Technological innovations have occupied spaces in various sectors of society, including the health sector. In this specific sector, there is a pressing need to use technologies to improve educational conditions, which is capable of modifying professional practice and guaranteeing the safety of users through the empowerment of health professionals[2].

In this regard, health professionals are being challenged to integrate technological resources in the development of educational practices in health[2], including online environments[3] and intelligent mobile technology[2], since access to information from anywhere and at any time can be effective labor market dynamics[3] and with positive repercussions on clinical education[2].

However, given the weaknesses in the development of educational practices aimed at health professionals, these being aimed at individual updating of professionals, within a traditional logic of information transmission, associated with low user participation in discussions related to the health-disease process and functioning of health services, it can be observed in the dynamics of the health services fragile adherence to changes in professional practice and lack of other conformations[4].

In this context, the health management needs planning that can influence professionals in the search and sharing of knowledge with the entire health team[5] and their co-responsibility in the health education process is fundamental. In the same way, it is indispensable that managers follow the evolution of this process, i.e., of management of educational practices, investing in professionals through innovative technologies and resources[5-6] as well as in the development of competencies that provide motivation and lifelong learning that meet the needs of users and staff[7].

Considering that the management of educational practices in health presents itself as a potential space for the nurses' performance in order to qualify and enhance the performance of the nursing and health staff[4]. This literature review aimed to know the resources used and the competencies required by nurses for the management of educational practices in health services.

METHOD

It is an integrative review of literature that proposes from a research protocol previously prepared and validated by professors of a federal public university with expertise in the subject, establishing defined criteria on data collection, analysis and presentation of the results. For its construction were taken the steps provided for the establishment of integrative literature review: 1) selection of the research question; 2) definition of the inclusion criteria of studies and sample selection; 3) representation of selected studies in the form of tables or charts; 4) critical analysis of the findings; 5) interpretation of the results; and 6) description of the evidence found[8].

The search for scientific articles occurred between September 2016 and February 2017. The descriptors "Gestão em Saúde" and "Enfermagem" and "Educação" were used, and their correspondents in the English language "Health Management" and "Nursing" and "Education". The selection had as search question: *Which management tools are used by nurses to manage educational practices in health services?*

Scientific articles fully available online were included, in Portuguese, English and Spanish, published between the period 2011 to 2017 and were excluded editorials, theses, dissertations, review articles, monographs, completion of course work and original articles that do not have addressed the theme of this review and have been published outside the established period as shown in figure 1.

RESULTS

When analyzing the 18 articles selected it was verified that 14 articles (77.7%) are international productions and four articles (22.2%) are national. In total, 13 articles have qualitative focus, two articles have quantitative focus and three articles are studies that used both quantitative and qualitative approach.

Regarding the country of origin of the study, the United States of America (USA) presented five articles (27.7%), Brazil four (22.2%), Iran three (16.6%), Finland and China with two each (11.1%), Japan and Spain with one each (5.5%). With regard to the context of the studies, the hospital environment stood out with 11 studies (61.1%), primary care with three (16.6%), long-term institutions with two (11.1%), hospital environment and the home environment with one each (5.5%).

The result of the analysis allowed to organize the data in three categories: "Instrumental resources used in health education", "Technological resources applied to educational practices" and "Competencies for management of educational practices". The articles analyzed were organized in Chart 1, showing the following data: author and year, place, type of educational practice, possible repercussion and category of analysis.

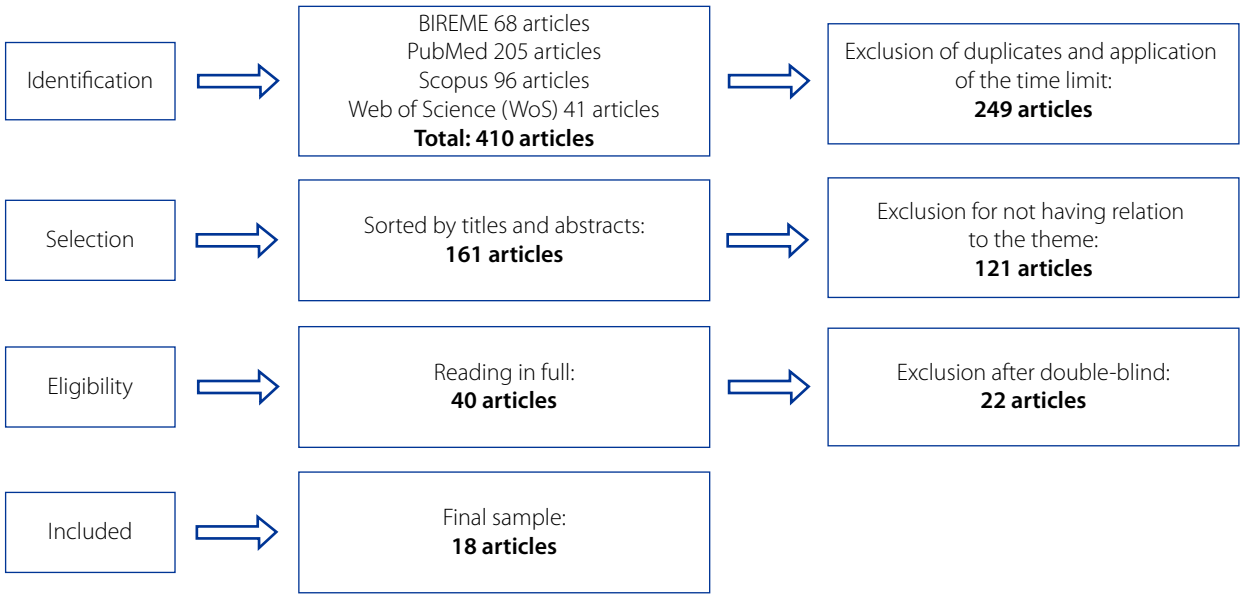

Figure 1 – Flowchart of the selection process and exclusion of the studies in the period between 2011 and 2017

Source: Authors

Author and year	Place	Type of educational practice	Repercussion	Category
Lin H et al, 2015[9]	China	Telephone counseling and use of educational manuals	Preventive behavior; anxiety and stress levels reduction	*Instrumental resources used in health education*
Ameryoun A et al, 2016[10]	Iran	It does not have direct intervention	Development of health professionals	
Seyedin H et al, 2015[11]	Iran	Intra-hospital guidance	Lower level of stress, complication rates, hospital readmissions and hospitalization time; better recovery	
Ikeda Y 2014[12]	Japan	Educational practices directed to waste management	Adequate disposal of hospital medical waste at home	
Chuang C et al, 2011[13]	USA	Telephone nursing assistance and an action plan	Early detection of acute exacerbations and individuals with competence for self-management of the disease	
Edmonds S et al, 2016[14]	USA	Educational booklet	Best level of patient satisfaction	

Harvey G et al, 2012[15]	Europe	Practical Application of the Clinical Evidence System (PACES)	Knowledge of new information technologies	*Technological resources applied to educational practices*
Kaakinen P et al, 2015[16]	Finland	Training for telephone screening	Improvement of knowledge and attitude of nurses	
Cruz E et al, 2012[17]	Brazil/PE	Web Conferencing Seminars	Need for protocols and continuing education	
Potter AJ et al, 2014[18]	USA	Use of Telemedicine	Improving access to health care; recruitment and retention of professionals	
Bel-Pena N et al, 2012[19]	Spain	Observation procedure	Decreased hemolysis in venous blood collection	*Competences for management of educational practices*
McCaughey D et al, 2014[20]	USA	Frequent educational practices and Observation of work dynamics	Decrease in injury rates	
Jansson, MM et al, 2015[21]	Finland	Observation during procedure	Adequacy of procedure	
Gomes I et al, 2014[22]	Brazil/RS	It does not have direct intervention	Qualification of health care	
Pettit SL et al, 2012[23]	USA	It does not have direct intervention	Need for protocols and continuing education	
Koerich C et al, 2016[24]	Brazil	It does not have direct intervention	Qualification of Nursing Care and Patient Safety	
Koerich C et al, 2016[24]	Brazil	It does not have direct intervention	Need for managerial training of nurses for educational practices	
Chang C et al, 2015[25]	China	It does not have direct intervention	Need for professional theory and practice interaction	

Chart 1 – Scientific production according to database, publishing journal, title, authors and year of publication and location of the study.

Source: Research data, 2017

Instrumental resources used in health education

A study carried out in the USA with elderly patients on osteoporosis showed that after an intervention with *educational booklet* patient satisfaction increased in relation to care received[14]. Positive results were also obtained with the implementation of planned health education programs, which had *educational manual* for the user and his/her follow-up[9,13].

These actions resulted in an increase in the user's level of knowledge about their illness, preventive behavior, fewer hospital admissions and emergency consultations and, consequently, lower costs for health services and their families[9,13]. In hospitalized patients, such practices had lower rates of complications, shorter time of hospitalization, fewer readmissions and better recovery, especially when directed toward self-care after discharge[11].

In this sense, international studies have been discussing the approach of patients by nurses, either for *home*

self-care guidelines, or to assess the patient's care needs by telephone[9,11-13].

The telephone and use of educational manualsas *case management strategies* to help patients improve their knowledge, behavior and health status in the face of an illness is a practice which tends to encourage people to adhere to preventive behavior, besides reducing the levels of anxiety and stress[9,11].

In California, a one-year pilot program with a care group managed to train patients with chronic obstructive pulmonary disease (COPD) aimed at self - management of the disease and improvement in quality of life, included *telephone nursing care* and a plan of action for exacerbation of COPD symptoms. The result was the early detection of acute exacerbations and individuals with competence for self-management of the disease, as well as greater adequacy of resources with health[13].

Moreover, a study carried out in Japan on the separation and disposal of home medical supplies from home health care services found that *educational practices directed to nurses* is a key factor in the education of the patient[12] since it facilitates the execution of the assignments in the work and increases the skill of the professional[10].

Technological resources applied to educational practices

A study conducted in Australia investigated the *application of the clinical evidence system* (PACES - *Practical Application of Clinical Evidence System*) of the Joanna Briggs Institute (JBI)for nurses in nursing homes. The program comprises three phases: 1) clinical pre-audit; 2) implementation of good practices; 3) post-implementation audit and concluded that it is necessary to encourage the use of new technologies, information and estimated time for adequacy of professionals to the implanted systems[15].

When investigating the effects of training for nurses on assessment of care needs of patients in the *telephone screening* in a hospital emergency unit in Finland, it was found that the intervention improved nurses' skills to assess needs of patient care, considering that there was a significant difference in the resources, knowledge and attitudes of the patients between the baseline and post-test measures. The study reinforces that this type of training must be continuous by reinforcing professional competence[16].

In the northeast of Brazil, a study that sought to characterize the profile of seminars by *web conference* for health professionals from the records of the tele-education service of the Nucleus Network of Telehealth, identified the need to stimulate participation of the health professionals in permanent training, in order to strengthen the actions of health promotion and the integral care in a continuous way[17].

In the USA, the *telemedicine* is used as a resource to support professionals working in rural areas, away from large centers, and therefore without specialists. This technology can improve both the access of users and the recruitment and retention of professionals in these areas[18].

Competences for management of educational practices

The results show the need for *managerial training* of the nurse to manage educational practices in health institutions[24]. In this sense, the *supervision* as a managerial tool for nurses aims to strengthen educational practices in health. Through supervision it is possible to evaluate the structure of the service and check its salubrity for the professionals, as well as to understand the weaknesses and needs of the team[20].

A study carried out in Spain stated that *direct observation* with guidance to the nursing professional contributes to the reduction of hemolysis in venous blood collection[19]. Still, when working with hand hygiene simulation, a study showed that the professional when supervised tends to perform the procedure properly. However, the study states that a single simulation session is not enough to modify the practice actions requiring permanent education[21].

It should be emphasized that the functioning of health services beyond supervision is affected by the structure available, by the number of professionals available, by *effective communication* among professionals and by access to permanent educational practices, factors capable of reflecting in satisfaction and increase the commitment of professionals[22].

The health institution must create a favourably environment to nurses' adherence to educational practices and to have a commitment to the institution[4], considering that professionals may have *a sense of responsibility* on a given practice, but they are poorly prepared/able to provide care, pointing to the need for protocols and continuing education in hospital[23].

In Taiwan, a study pointed out that training programs of nursing preceptors were considered clinically impracticable, requiring adjustments in order to attend the interaction between theory and practice[25]. In this way, the educational practices in the health services need to happen naturally as a continuous exchange of knowledge, and be focused on the work reality, being the nurse responsible for the *motivation* and *involvement of the team* in this sense[4,24].

DISCUSSION

There is a diversity of *instrumental and technological resources* that can be used in educational practices, but the *booklets and educational manuals* were the most pointed elements as instrumental resources that favor the relation between nurse and patient, positively impacting their satisfaction and increased their autonomy.

Despite the facilities exposed, the manuals need a construction process that includes planning, permeating from the definition and selection of contents, adaptation of scientific language to popular language, selection of images and qualification. A study in Portugal described the development and validation of an information booklet on capillary glycemia and emphasized the need for a global assessment and analysis by experts, as well as testing on a representative sample before distribution[26].

However, the lack of a permanent educational scenario in health services reflects the lack of preparation of professionals for health education, ranging from the organization (elaboration of manuals and protocols) to the act of the educational practice itself[14]. Another issue is the lack of dialogue between health professional and user, this being an important barrier that prevents the professional from discovering and understanding the real need of the user, and the best way to help him[11].

In this way, the impersonality of health education practices, as well as the lack of planning for such procedure, reveals that it is necessary to look at the uniqueness of each individual, in order to determine the type, time and form of the practice. As well as, consider how the users receive the guidelines, if they understand them, and if the type of educational practice will bring positive results[11].

The use of the *telephone* for health follow-up runs away from the traditional method, in which the patient finds the professional in an institutional environment, since it starts from *self-management of the user*, which is, knowledge, monitoring and maintenance of their own health/illness. This type of resource can create a sense of co-responsibility in those involved and reflect on a more effective treatment[25].

This finding corroborates a study developed with patients who underwent chemotherapy and conducted nursing consultations over the telephone, which pointed out that the continuity of care through this resource generated a higher level of satisfaction, reduced stress, improved the relationship with the professional and adherence to treatment[27]. In this sense, it can be affirmed that behavioral and educational interventions by telephone are effective in adherence to preventive health practices[28].

Another model of provision of health services has been gaining ground in multidisciplinary teams known as *Management/Case Managements*, which is defined by a health team or a single professional who is responsible for the patient during the whole clinical process, aiming to increase the quality of life of the patient and family, ensuring a link between them and the professional and greater adherence to treatment and/or preventive action avoiding health problems[10].

In primary health care units in London, England, nurses had their functions expanded by the need for services to reduce costs. This contingency has made the nurses a reference for the management of chronic diseases in the health team and for this reason they work intensely in case management, guided by protocols of care and drug treatment, guidelines for changes in lifestyle and individual monitoring. The nurses received training and have had time to adapt, gaining space in case management and increasing the resolution and user access[29].

In Brazil, the use of *technologies* has expanded the realization of more dynamic educational practices that allow professionals to support each other, as in the case of *Telehealth networks,* which aim to approach and allow the strengthening of health professionals to offer permanent education[30]. However, in order for these resources to have positive effects, there is a need to have professionals trained to use *electronic platforms*.

However, the high turnover of professionals and obsolete equipments, may make it impossible to use digital tools in a satisfactory manner, negatively affecting access and technological inclusion[31]. Thus, it is important that the type of educational practice for the health professional is considered and planned, especially when involving technologies and skills with information systems, since they require prior knowledge.

The educational practices are important for the development of competencies in health professionals and these competences are essential in the management of educational practices. Among the competencies required for the management of educational practices, nurses have in the *communication* a base of support to carry out its activities, whether related to health education or to the education of the team[32].

In a study carried out on the managerial training of nurses that investigated the fields of: knowledge, skills and attitudes revealed that the skills of communication, leadership and permanent education present deficits when considered the fields *abilities and attitudes* needing to be still best explored in undergraduate[33].

The lack of preparation in the academy for the management of educational practices is reflected in the low

adherence of professionals to educational actions. Adherence is related to the meaning/reason of these practices, i.e., it is important that educational processes relate to the daily work of the health professional so that the problems of practice motivate the themes addressed according to the logic of permanent education in health[34].

It stands out as the main benefit of permanent educational practices the *motivation* and the feeling of appreciation of professionals, resulting in greater commitment and consequently better results in health services[35-36].

In this sense, the nurse as a manager of the team and the nursing care needs to be empowered with educational models, new techniques and protocols, communication skills, problem-situation detection and organizational change development using his/her *leadership* to involve the team in the performance of a safe and qualified care[26].

The study pointed out that the need for permanent education is felt by nurses who act as nursing managers in health institutions, in the face of the responsibilities that involve management, from mediating *planning, supervision and evaluation* of the nursing care of the units until the determination of the maintenance procedures adopted or indicated by the best evidence[35].

In this context, supervision as a management tool in the nurses' work process aims to promote reflection and discussion about professional practice. When this action is only developed with the intention of verifying that what is being carried out is correct or not, the objective of control perpasses the one of emancipation of the team[37].

Thus, it can be affirmed that the supervisor has a fundamental importance in guaranteeing the quality of the work of the team, and should assist in the implementation of protocols, routines, safety procedures and intervene with additional resources when necessary[19,21].

A trained nursing manager who is aware of the impact of continuing education practices is capable of promoting significant changes in the quality of life of patients and staff[36,38], impacting the reduction of adverse events[39], generating a lower rate of absenteeism[36] and improved care[38-39].

In this respect, the interface between the management of educational practices and health care is able to favor professionals and users to educate others and themselves permanently in the different spaces and moments, lacking strategies for the qualification of health care through practices educational processes that favor the necessary change process[22].

FINAL CONSIDERATIONS

This study brings as a contribution to the practice of nurses subsidies for the development of management of educational practices in health services through technological and instrumental resources capable of strengthening professional performance, the link and adherence of users to self care, as well as professional competencies aimed at team development, user autonomy and institutional growth.

The results emphasize the instrumental resources most used in health education by nurses, such as educational manuals, pointing out the need for planning in their construction, and telephone follow-up, whose purpose is to promote patient self-management of the disease. It emphasizes the growing role of nurses in case management with the use of instruments allies in the care of a multiprofessional team. The application of technological resources in the education of health professionals, such as web conferencing, telehealth and telemedicine, with its advantages and challenges. And the necessary competencies for nurses to manage educational practices, such as supervision, communication, leadership and managerial and educational training.

As a limitation, the selected studies presented little detail on the planning and implementation of resources in the management of educational practices, making it difficult to analyze the benefits and quality of the performed practice. It is highlighted the need for research that develops the Nursing's role in the area of case management and telephone follow-up, considering this a gap for the development of nursing *praxis*.

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FUNDING:

The study received funding of the Support Fund to the Maintenance and to the Development of the Higher Education – FUMDES.

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Received: 03.06.2018
Approved: 11.16.2018