

Project *Evidência* [evidence] – research and education about accessing scientific databases in Azores

PROJETO EVIDÊNCIA: INVESTIGAÇÃO E FORMAÇÃO SOBRE ACESSO A BASES DE DADOS DE INFORMAÇÃO CIENTÍFICA NOS AÇORES

PROYECTO EVIDENCIA: INVESTIGACIÓN Y FORMACIÓN SOBRE ACCESO A BASES DE DATOS DE INFORMACIÓN CIENTÍFICA EN LAS AZORES

Hélia Soares¹, Sandra M. Pereira², Ajuda Neves³, Amy Gomes⁴, Bruno Teixeira⁵, Carolina Oliveira⁶, Fábio Sousa⁷, Márcio Tavares⁸, Patrícia Tavares⁹, Raquel Dutra¹⁰, Hélder Rocha Pereira¹¹

ABSTRACT

Project *Evidência* [Evidence] intends to promote the use of scientific databases among nurses. This study aims to design educational interventions that facilitate nurses' access to these databases, to determine nurses' habits regarding the use of scientific databases, and to determine the impact that educational interventions on scientific databases have on Azorean nurses who volunteered for this project. An intervention project was conducted, and a quantitative descriptive survey was designed to evaluate the impact two and five months after the educational intervention. This impact was investigated considering certain aspects, namely, the nurses' knowledge, habits and reasons for using scientific databases. A total of 192 nurses participated in this study, and the primary results indicate that the educational intervention had a positive impact based not only on the increased frequency of using platforms or databases of scientific information (DSIs) but also on the competence and self-awareness regarding its use and consideration of the reasons for accessing this information.

DESCRIPTORS

Evidence-based nursing
Databases, bibliographic
Nursing research
Education, nursing, continuing

RESUMO

O projeto *Evidência* visa estimular os enfermeiros na utilização das bases de dados de informação científica. Este estudo teve por objetivos desenhar uma intervenção formativa facilitadora do acesso a essas bases de dados por parte dos enfermeiros, efetuar avaliação de diagnóstico relativamente aos hábitos dos enfermeiros quanto a esse tipo de ferramenta e determinar o impacto de uma intervenção formativa sobre essas matérias entre os enfermeiros residentes nos Açores. Em termos metodológicos, foi desenhado um projeto de intervenção e realizado um estudo quantitativo, do tipo descritivo, para avaliar esse impacto aos dois e cinco meses após a formação, em dimensões como o conhecimento, hábitos e objetivos de utilização. No projeto participaram 192 enfermeiros, e os resultados apontam para um impacto positivo dessa formação, não só no aumento da frequência de utilização das bases de dados de informação científica, como na autopercepção de competência na sua utilização e motivos invocados para explorar esse tipo de informação.

DESCRITORES

Enfermagem baseada em evidências
Bases de dados bibliográficas
Pesquisa em enfermagem
Educação continuada em enfermagem

RESUMEN

El proyecto *Evidencia* procura estimular al enfermero a utilizar bases de datos de información científica. Se objetivó ejecutar una intervención formativa para facilitar el acceso a tales bases por parte de enfermeros, efectuar evaluaciones de diagnóstico relativas a hábitos del enfermero respecto de dichas herramientas y determinar el impacto de una intervención educativa sobre el tema entre enfermeros residentes en las Azores. En términos metodológicos, fue diseñado un proyecto de intervención y realizado un estudio cuantitativo y descriptivo, para evaluar ese impacto a los dos y cinco meses luego de la formación, en dimensiones como conocimiento, habitualidad y objetivos de utilización. Participaron 192 enfermeros. Los resultados expresan un impacto positivo de la formación, no sólo en el aumento de frecuencia de utilización de bases de datos, sino también en la autopercepción de competencia en el uso y motivos expresados para abordar este tipo de información.

DESCRIPTORES

Enfermería basada en la evidencia
Bases de datos bibliográficas
Investigación en enfermería
Educación continua en enfermería

¹ Adjunct Professor at the University of the Azores – Superior School of Nursing of Angra Heroism, PhD student and Master of Science in Nursing. E-mail: hmsoares@uac.pt. Correspondence: Canada dos Melancólicos, Angra do Heroísmo, Portugal. hmsoares@uac.pt ² Adjunct Professor of the University of the Azores Superior School of Nursing Angra do Heroísmo and PhD in Bioethics. smperreira@uac.pt ³ Head Nurse at the Horta Hospital, E.P.E., PhD student in Nursing and Master of Science in Nursing. ajudaneves@gmail.com ⁴ RN of the Hospital of Horta E.P.E. amy_faial@yahoo.com ⁵ Assistant at Azores University – Superior School of Nursing of Ponta Delgada. bnteixeira@uac.pt ⁶ Assistant Professor at Azores University – Superior School of Nursing of Ponta Delgada, Master of Science in Nursing and a PhD student in nursing. carolinafpoliveira@gmail.com ⁷ RN at the Health Centre of Ponta Delgada and Master of Science in Nursing. fabioalexandre.sousa@gmail.com ⁸ Assistant Professor at the 2º Triennium of the Azores University – Superior School of Nursing of Ponta Delgada, PhD student of Science in Nursing and Master of Social Sciences. mftavares@uac.pt ⁹ Assistant Professor of Azores University – Superior School of Nursing of Ponta Delgada, PhD student and Master of Science in Nursing. patavares30@gmail.com ¹⁰ RN at the Health Centre of Ponta Delgada and Master of Science in Nursing. raquel_dutra31@hotmail.com ¹¹ Adjunct Professor, coordinator of the project Evidence of Azores University – Superior School of Nursing of Ponta Delgada and PhD in Nursing. hpereira@uac.pt

INTRODUCTION

Access to current scientific information is a prerequisite for practicing nursing with quality and evidence-based scientific rigor. In this sense, there are many and various methods for accessing scientific evidence for nursing. This premise is assumed by the scientific nursing community, especially the impact it has on assuring a quality of care and the proper recognition and appreciation of nursing as a profession with an autonomous body of knowledge itself^(1,2). In fact, *continuously updating their knowledge and competently using technology without forgetting depth and lifelong learning in the humanities*⁽³⁾ is essential to nursing.

However, access to platforms or databases of scientific information (DSIs) appears to be lacking for nurses. Indeed, a study conducted in 2005 in the United States of America using 1,007 nurses found that the majority reported never having performed research on a DSI, and over 80% of the participants stated that they did not use the hospital library⁽⁴⁾. A pilot study published in Portugal in 2007 concerning the need for scientific information for practicing nurses included 124 nurses from four hospitals in Lisbon and found that only 45% of them consulted databases and 31% reported not having consulted one during the previous year⁽⁵⁾.

The reasons generally given for this limited DSI access are a lack of competence with searching tools^(1,5); organizational factors at the institution where the professional works, namely, a lack of time^(1,6); the attitudes of the nurses themselves regarding their professional practices based on scientific evidence^(1,7,9); and the fact that searching for information in a DSI seems like a solitary activity⁽⁸⁾.

Nevertheless, the use of DSIs is considered essential for decision making inherent to the offered care⁽⁹⁾ and constitutes a support to the professional practice of nurses for their various areas of care — formation, management and research. Thus, resorting to DSIs constitutes a challenge to nurses, health care institutions and nursing organizations⁽¹⁰⁾. The most frequently reported means of facilitating the use of DSIs are the inclusion of organizational, culture and accessibility tools and the resources to access them along with professional training^(1,11).

Considering the dispersed geographic location of the Azores, DSIs are an important source of information. However, there is a perception that most nurses do not habitually use DSIs to support their care practices. Although the small number of participants limits any conclusions drawn from a survey of 17 nurses who started post-graduate courses at one of the nursing schools at the University of the Azores, the majority of nurses (15) primarily resorted

to using search engines on the Internet and books (13 nurses) when researching topics related to their professional practices. Furthermore, when asked about the use of DSIs, only five of these nurses referred to Medline, and only three knew of Scielo and B-on.

Currently, professional progress inevitably occurs via the monitoring of new technologies; therefore, the Order of Nurses (OE) in Portugal provides online DSI access to all nurses. However, there is a perception that this tool is rarely used by nurses living in the Azores.

For this reason, the Regional Section of the Azores Autonomous Region (SRRAA) of OE developed a project - Evidence — to sensitize nurses and promote the increased use of this type of tool. The following objectives were listed:

- To design a facilitating formative method of intervention for nurses to access platforms or DSIs;
- To perform a diagnostic study on the DSI usage habits of nurses living in the Azores who participate in this training;
- To evaluate the gains from the training regarding the knowledge and use of DSIs by these nurses two and five months after training.

Considering the dispersed geographic location of the Azores, DSIs are an important source of information.

However, there is a perception that most nurses do not habitually use DSIs to support their care practices.

METHODS

Project Evidence was created as an intervention study per the guidelines of Burns and Grove⁽¹²⁾ with the following phases: planning the intervention project, gathering the necessary information, developing the intervention theory, conceiving the intervention, establishing an observation system, testing information, collecting and analyzing data and disseminating the results. The intervention was structured as follows: classroom training lasting two hours, the establishment of formation groups with six to ten members. The session methodology included two components: a first component intended to briefly explore concepts related to evidence-based practices, and a second component intended for trainees to mobilize the acquired theoretical knowledge to individually access the DSI for the consultation and downloading of relevant studies from the published literature. The formation groups were further supported with background materials prepared by the project group, namely, users' support manual and the e-learning platform Moodle from the Azores University, which provided both manuals and forum questions for trainees.

To disseminate this intervention, all health institutions in the Autonomous Region of the Azores and the two higher education nursing schools located in the archipelago officially received information on formative interventions. In

addition, this information was provided in the newsletter of the OE at the SRRAA site, which had also created a project page on Facebook. Twenty-six formative sessions were planned to be held on the three islands with the highest population densities and greatest numbers of nurses - São Miguel, Terceira and Faial.

These formative interventions produced a quantitative study for describing the usage habits of DSIs and the impact of the training two and five months after its completion. With this objective in mind, the following instruments for data collection were described:

- Self-reported questionnaires, which were used to determine the sociodemographic and professional characteristics of the participants and their DSIs usage habits, were administered to all participants at the beginning of each training session;
- Follow-ups of these questionnaires on DSI usage habits were conducted via telephone to participants of the training two and five months after its end.

Both questionnaires had a set of identical and closed questions regarding DSI usage habits, particularly regarding the frequency of use, which database was used, the associated grounds, place of use, any difficulties, a self-assessment of the skills and knowledge in this field, and the practical applicability of the information collected from the DSIs for everyday professional practices. The questionnaire was administered by telephone by an administrative officer of the SRRAA of OE and lasted approximately five minutes per participant.

Given the absence of a formally established ethics committee in the Azores, the ethical procedures were implemented with respect to the autonomy of the participants in the study. Therefore, informed and clarified consent of all participants was requested at the beginning of each training session after explaining the objectives of the study and indicating that the professionals would be contacted afterwards. Due data collection employed two types of questionnaires — one self-administered and another by telephone — consent for its implementation was presumed within this study⁽¹³⁾. From this perspective, the return of the completed questionnaire and providing answers to the questions administered by telephone were considered voluntary consent of the respondent and training participant.

The collected data were processed and analyzed using the Statistical Package for Social Sciences (SPSS, version 15.0) software. These data were used to perform an analytical and descriptive statistical analysis. The results are presented in terms of the absolute (n) and relative (%) frequencies.

In the scope of this project, 22 training sessions were held between April and May of 2011. These sessions were held in the following locations: 6 out of the 12 planned

sessions in S. Miguel (50%); 5 out of the 8 planned sessions in Terceira (62.5%); and 6 sessions as planned in Faial (100%). Although initially not expected, other sessions were scheduled to occur in the islands of Santa Maria (2), Pico (2) and S. Jorge (1).

This study involved 192 nurses (15% of the total nurse population living in the Azores). These participants were between 22 and 68 years old (average 33.2 years old), 85% were female, 74.5% possessed a graduate degree as their highest qualification, and 17.2% had completed a masters or postgraduate work specializing in nursing. The areas of professional practice of 95.8% of the participants were in care provision in different settings (hospital, health center or other institution providing private care). For their professional category, 52.6% of the nurses were level 1, which corresponds to a generalist nurse.

RESULTS

With respect to the participants in the formative interventions, the following results were obtained on the diagnostic evaluation of the DSI usage habits before the session:

- 113 participants (58.9%) stated that they were unaware of any database or platform for scientific research.
- The DSIs best known by the remaining 79 (41.1%) participants were:
 - Medline (53,2%).
 - B-on (48,4%).
 - Scielo (46,8%).
 - Pubmed (40,5%)
- Of the 79 participants who reported knowledge of any platforms or databases, 65 (82.3%) had used them for the following reasons:
 - The development of academic work (75.4%).
 - Problem solving or doubt in their professional practice (35.4%).
 - To elaborate on professional and institutional projects or in-service training projects (35.4%).
 - For curiosity or personal interest about a subject (35.4%).
- For the site of these consultations, 52.3% of the participants stated that they looked at platforms or DSIs at home, 56.9% at a school or university, and 38.5% in their workplace; therefore, nurses visit DSIs in more than one context;
- 67.7% of participants reported the following difficulties associated with using DSIs:

- finding the desired information (54.5%).
- delimiting the search fields (45.5%).
- mastering the language of origin for each database (34.1%).
- 89.2% of the participants reported a *satisfactory* level of knowledge for handling the options available for use in the DSIs.
- With respect to the frequency of use, the majority (69.2%) of participants responded *any time* or *one to two times* in the last two months.
- 42.5% of the nurses who participated in the training reported they learned about the DSIs through a friend or co-worker, 31.1% through institutions and 25.5% through navigating the OE site. Only 15.1% mentioned that their knowledge of DSIs stemmed from an institution of higher education.
- 28.1% of respondents consider the information provided by the DSIs *important* and 68.8% consider it *very important*.

The gains from the formative intervention and the impact they had on the use of DSIs for the participating nurses were determined two and five months after completion of the sessions. The following comparative results were obtained for these two evaluations considering that, of the 192 nurses who participated in the training, 161 (83.9%) answered the questionnaire by telephone at two months and 158 (82.3%) at five months:

- It was found that, two months after training, over half of the respondents — 101 subjects (62.4%) — indicated having used DSIs at least once, with a higher relative percentage reporting usage of *between one and two times* (43.5%). Five months after the formative intervention, there were significant decreases in usage, and only 68 (43%) of the participating nurses mentioned having used them, with the highest percentage reporting a DSI usage of *in the last two months*, which also refers to *between one and two times* (21.5%) (see Figure 1).

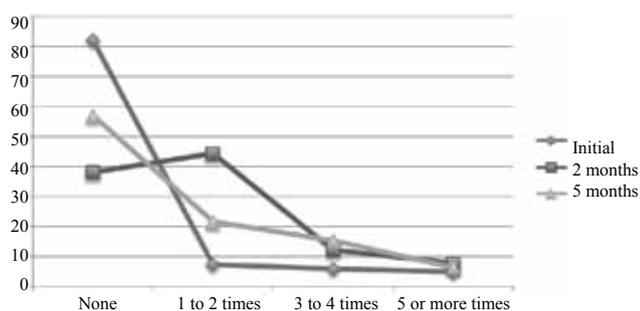


Figure 1 - Frequency of use for DSIs at the three evaluation time points (initial, two months and five months after the formative intervention)

- The most used DSIs appear to be the following for both evaluation periods:
 - B-on (37.9% and 27.8% at two and five months, respectively).
 - Medline (31.3% and 25.9% at two and five months, respectively).
 - Scielo (28% and 19.6% at two and five months, respectively).
- The principal reasons for using the DSIs were found to be identical during the two and five month follow-ups, namely:
 - Curiosity (38% and 31% at two and five months, respectively).
 - Solving problems or doubts in professional practice (35% at two months and 34% at five months after formation).
- Two months after the formation intervention, 53% of participants stated they had accessed the database from home compared to 55% after five months.
- There was a decrease in the difficulty of using the DSIs after the training, whether after two months (reported by 30% of participants) or five months (referenced by 37% of nurses). The following difficulties in this phase were outlined:
 - For two months after the training, finding information (32%) and lacking knowledge of a foreign language (28%).
 - For five months after the formation – lacking knowledge of a foreign language (32%) and finding information (28%).
- When asked about their skills in mastering the DSIs, 53% of nurse participants evaluated themselves as *very competent* two months after the training, and this percentage increased to 58% after five months.
- Two months after the formative intervention, 89% of the participating nurses opined *yes* that the information obtained from the DSI was applicable to their daily professional practice, and after five months, this percentage increased to 94%.
- For their current level of knowledge on the searching options and handling in DSIs, both time points (two and five months after the formative intervention) primarily reported a *good knowledge* level with 47.8% and 51.3% for 2 and 5 months, respectively. A knowledge of *very good* decreased between these two time points (32.3% and 23.7%, respectively).

Considering that when the formative interventions were delineated and implemented, they reflected the

possibility of participants later accessing the content of the e-learning platform Moodle at the University of the Azores and a user manual available for that platform, the telephone questionnaire asked two questions relative to the usage and usefulness of both. The following results were obtained:

- Two months after the training, 60% of respondents stated that they had accessed Moodle to download the aforementioned manual.
- No participant used the online forum to share their experiences or doubts.
- Between two months and five months after the formative intervention, there was a decrease in the usage of the user manual (49% at two months versus 39% at five months).
- At two and five months, the majority of participants (45.5% and 55%, respectively) considered the manual *extremely useful*.

DISCUSSION

In relation to the use of DSIs by nurses living in the Azores and that participated in project Evidence, it was found that more than half of them had, at first, lacked effective knowledge, which reinforces the importance of formative intervention that was delineated and implemented under the project.

Indeed, the frequency of access and use of these platforms before the training was low. In contrast, the participating nurses began researching the DSIs more regularly after the program's implementation, which agrees with many authors who consider the training a facilitator for using this type of device^(1,11).

With regards to which DSIs were more frequently used by the participating nurses, no differences were observed for the three evaluated times. In fact, the most used DSI platforms were the same — Medline, Scielo and B-On. Regarding this result, it was questioned if the increased accessibility to Scielo was related to language difficulties (note that Scielo is a DSI that comprises mostly articles in Portuguese), as well as the fact that it is possible to obtain its access through search engines.

The reasons the DSIs were used were found to be different between the first evaluated time (before the training) and the remaining two time points (after training). Thus, while most nurses only consulted the DSIs to elaborate on some type of academic work before the formative intervention, two and five months afterwards, the participants started using the devices primarily with the aim of resolving problems or doubts from their professional practice. Although indirect, this aspect agrees with the premise assumed by the nursing scientific community that considers the effective use of information and

scientific evidence relevant to ensuring quality of care⁽¹⁻³⁾. Furthermore, the relevance of continuously updating the knowledge of nurses should be emphasized⁽⁴⁾, and a proactive attitude, interest and curiosity (this aspect was also mentioned by the participants as a factor underlying the use of the DSIs at two and five months after the formation) are particularly important.

This study found that the location of choice for conducting the DSI research changed, which agrees with the reasons that initiated the research. Indeed, before these formative interventions, the most commonly mentioned location was a school or university (an aspect that, in our opinion, may be associated with the fact that most of the participants had pointed to the development of academic work as their triggering element). After training, this research began to generally occur at home or in the workplace (most likely because the research was, at this stage, motivated by doubt from professional practice or curiosity).

The difficulties associated with using the DSIs decreased significantly after the intervention. This finding reinforces the importance of training in this area because such training may, as previously mentioned, explain the increased use of these devices by the participating nurses. Note that regardless of the evaluation time, the mentioned difficulties were related to the lack of competence in searching tools^(1,5). In fact, the difficulty in finding the desired information (mentioned in the three evaluation periods) may be related to this aspect, particularly with regard to the delimitation of consultant fields and their nomenclature, and above all, due to the use of a foreign language (a difficulty that was indicated more frequently during the final evaluation). In our view, this finding lends additional weight to the challenge of integrating the use of DSIs as an important contribution to daily professional practice⁽¹⁰⁾.

The formative intervention was particularly helpful in developing the knowledge and skills of the participants. Essentially, from an initial level of knowledge deemed *satisfactory* by the nurses, it was found that these same nurses evaluated themselves as *very competent* in the usage of this type of device after two and five months of training. As for knowledge concerning accessing options and handling of the DSIs, the participants rated themselves as mostly *good* after two and five months of training. However, it was found that the percentage of nurses that evaluate themselves as having *excellent knowledge* and *very good knowledge* decreased. This result may be associated with the self-awareness that there are always more aspects to explore and learn about in addition to the level of knowledge already acquired. Furthermore, this viewpoint may be explained by the large gap between the theoretical support and training provided. Moreover, considering the barriers cited by some authors, which reduced nurses' access to DSIs⁽¹⁾, this aspect may also be caused by a decrease in the use of DSIs five months after training, most likely due to organizational difficulties such as a lack of time.

Finally, the use and usefulness of the Moodle platform and its user guide were found to decrease over time, despite the importance attributed to it by the participating nurses (most nurses cited it as *extremely useful* during the two and five month follow-ups). Furthermore, consideration must be given to the fact that the ability to download this manual from the Moodle platform has only recently been enabled. In our opinion, this capability enhances the usefulness of the manual on the one hand and increases the difficulty nurses may have in using computing platforms on the other hand.

CONCLUSION

The Evidence project was created to encourage the use of DSIs by nurses living in the Azores. From the results of this study, we can conclude that the formative intervention positively impacted the handling and use of this type of tool because the verified usage of DSIs almost doubled after training.

An important aspect emerging from this study relates to the underlying motivation of the research performed. In fact, prior to the formative intervention, the nurse participants primarily researched for academic works, whereas after two and five months, this factor has changed and the professionals have turned to DSIs to respond to the needs and problems arising from their everyday activities and curiosity. In congruence with these results, the location of accessing DSIs has also changed, leading nurses to use the DSIs not at a school or university, but at home and in the workplace.

Another outcome worth mentioning is associated with the difficulty in using this type of device. Two months after the formative intervention, the nurses reported a decrease in difficulties. During the final evaluation (five months after the formative intervention), the difficulty slightly increased, which on the one hand, enhances the positive impact of the training, especially in the immediate terms, and on the other hand, it raises questions about what the source of this new increase may be, placing the hypothesis that this increased difficulty is associated with the low frequency of using DSIs at that moment.

In addition to these final results, we still emphasize that there is an increase in the self-perception of the participant nurses about their knowledge and skills of using this type of tool due to the formative intervention. Finally, the user manual created under the project was extremely useful, which reinforces the impact of the implemented training.

In summary, we can say that, in general, the formative intervention performed in project Evidence positively impacted the participating nurses because it increased the frequency with which they used DSIs and increased the

perception of their level of knowledge and competence. However, the frequency of this usage for the referred platforms remains low.

Despite the conclusions presented here, it is necessary to reflect on some inherent limitations of this study:

- On the one hand, considering the small number of participants in the formative intervention, it is difficult to make generalizations regarding the effective impact of project Evidence in the Autonomous Region of the Azores (RAA).
- On the other hand, considering the importance of this topic, it could have been useful to include inferential statistical tests, which would have enriched the study and its results.
- However, for the second and third time points (two and five months after the training intervention, respectively), there were no correlations drawn between the sociodemographic and professional characteristics of the respondents and the other study variables, namely the profile and self-perception regarding knowledge and skills.
- Moreover, the application of the questionnaires were disparate, in that there were times when they were executed in person, while the follow-up questionnaires were executed by telephone, which may have influenced the answers given.
- Finally, the study did not assess the effective repercussion of the training in terms of associating it with professional everyday practice.

In this sense, once the project is completed, it becomes possible to suggest future studies and interventions, including the following:

- Encouraging the use of DSIs in institutions of nursing education as basic and essential tools for developing investigative and inquisitive attitudes in students, which substantiates their decisions based on scientific evidence.
- Increasing awareness among health institutions, particularly at training centers, to develop strategies for incorporating DSIs as a central element during the continuous training of professionals.
- Keeping within the SRRAA of OE, a team of tutors should ensure the continuity of formative interventions identical to those of the Evidence project.
- Create workshops aimed at not only educating nurses regarding the access and use of DSIs but also to become more competent in the selection of papers addressing the specific issues and professional needs raised in their practice.

REFERENCES

1. Brown CE, Wickline MA, Ecoff L, Glaser D. Nursing practice, knowledge, attitudes and perceived barriers to evidence-based practice at an academic medical centre. *J Adv Nurs*. 2009;65(2):371-81.
2. Wallen GR, Mitchell SA, Melnyk B, Fineout-Overholt E, Miller-Davis C, Yates J, et al. Implementing evidence-based practice: effectiveness of a structured multifaceted mentorship programme. *J Adv Nurs*. 2010;66(12):2761-71.
3. Nunes L, Amaral M, Gonçalves R. Código deontológico do enfermeiro: dos comentários à análise de casos. Lisboa: Ordem dos Enfermeiros; 2005.
4. Pravikoff DS, Tanner AB, Pierce ST. Readiness of U.S. nurses for evidence-based practice. *Am J Nurs*. 2005;105(9):40-51.
5. Ferrito CRAC. Enfermagem baseada na evidência: estudo-piloto sobre necessidades de informação científica para a prática de enfermagem. *Percursos*. 2007;(3):36-40.
6. Majid S, Foo S, Luyt B, Zhang X, Theng YL, Chang YK, et al. Adopting evidence-based practice in clinical decision making: nurses' perceptions, knowledge, and barriers. *J Med Libr Assoc*. 2011;99(3):229-36.
7. Tagney J, Haines C. Using evidence-based practice to address gaps in nursing knowledge. *Br J Nurs*. 2009;18(8):484-9.
8. Cubas MR, Egry EY. Classificação Internacional de Práticas de Enfermagem em Saúde Coletiva – CIPESC®. *Rev Esc Enferm USP*. 2008;42(1):181-6.
9. Prior P, Wilkinson J, Neville S. Practice nurse use of evidence in clinical practice: a descriptive survey. *Nurs Prax N Z*. 2010;26(2):14-25.
10. Rycroft-Malone J, Seers K, Titchen A, Harvey G, Kitson A, McCormack B. What counts as evidence in evidence-based practice? *J Adv Nurs*. 2004;47(1):81-90.
11. Oh EG, Kim S, Kim SS, Kim S, Cho EY, Yoo JS, et al. Integrating evidence-based practice into RN-to-BSN clinical nursing education. *J Nurs Educ*. 2010;49(7):387-92.
12. Burns N, Grove SK. *The practice of nursing research: conduct, critique, and utilization*. 5th ed. St. Louis: Elsevier Saunders; 2005.
13. Polit DF, Beck CT, Hungler BP. *Fundamentos de pesquisa em enfermagem: métodos, avaliação e utilização*. 5ª ed. Porto Alegre: Artmed; 2004.