TEACHING STRATEGIES IN PERIOPERATIVE NURSING: A STUDENT ASSESSMENT

Estratégias de ensino em Enfermagem Perioperatória: uma avaliação discente

Estrategias de enseñanza en Enfermería Perioperatoria: una evaluación de los alumnos

Carina Aparecida Marosti Dessotte[1], Ana Sara Mendes Teixeira[2], Camila Daniela Amorim de Sousa[3], Helena Megumi Sonobe[4]

ABSTRACT: Objective: to describe the students' evaluation of two undergraduate Nursing courses on the teaching strategies used in the discipline of Perioperative Nursing, in a Public University in the state of São Paulo. **Method:** an exploratory and cross-sectional study was conducted with students who were enrolled in the discipline prior to data collection. An instrument was created for multiple choice, addressing the evaluation of block theory, laboratory practice and clinical practice. **Results:** the participants were 39 students. The majority of the subjects evaluated the theoretical block as "good" or "very good"; the laboratories of clinical practice were evaluated by the majority as "good" and "excellent"; and the activities of clinical practice, developed in surgical wards, post-anesthetic recovery and operating rooms were evaluated, in general, such as "very good". **Conclusion:** the teaching strategies used in the discipline of Perioperative Nursing were well evaluated by undergraduate students.

Keywords: Perioperative Nursing. Teaching. Evaluation.

RESUMO: Objetivo: descrever a avaliação dos alunos de dois cursos de graduação em Enfermagem sobre as estratégias de ensino utilizadas na disciplina de Enfermagem Perioperatória de uma universidade pública do interior paulista. **Método:** estudo exploratório, transversal, realizado com alunos que cursaram a disciplina previamente à coleta de dados. Foi criado um instrumento de múltipla escolha, abordando a avaliação do bloco teórico, práticas de laboratório e prática clínica. **Resultados:** participaram 39 alunos, sendo que a maioria avaliou o bloco teórico como "bom" ou "muito bom"; os laboratórios de prática clínica foram avaliados pela maioria como "bom" e "excelente"; e as atividades de prática clínica, desenvolvidas nas enfermarias cirúrgicas, recuperação pós-anestésica e salas de operação, foram avaliadas, no geral, como "muito bom". **Conclusão:** as estratégias de ensino utilizadas na disciplina de Enfermagem Perioperatória foram bem avaliadas pelos alunos de graduação.

Palavras-chave: Enfermagem perioperatória. Ensino. Avaliação.

RESUMEN: Objetivo: describir la evaluación de estudiantes universitarios de dos cursos de Enfermería en las estrategias de enseñanza que utilizan en la disciplina de Enfermería Perioperatoria, en una universidad pública del estado de São Paulo. **Método:** estudio exploratório, transversal, realizado con los estudiantes que se inscribieron en la disciplina previos a la recogida de datos. Creado un instrumento de elección múltiple para abordar la evaluación del bloque teoría, prácticas de laboratorio y práctica clínica. **Resultados:** los participantes fueron 39. La mayoría evaluados el bloque teórico como "buena" o "muy buena"; los laboratorios de la práctica clínica fueron evaluados por la mayoría de los casos como "buena" y "excelente", y las actividades de la práctica clínica, desarrollado en salas de cirugía, post-recuperación anestésica y se evaluaron las salas de operaciones, en general, como "muy bueno". **Conclusión:** las estrategias de enseñanza que utilizan en la disciplina de Enfermería Perioperatoria fueron bien evaluadas por los estudiantes.

Palabras clave: Enfermería Perioperatoria. Enseñanza. Evaluación.

[1]Nurse. Professor at the Department of General and Specialized Nursing of Escola de Enfermagem de Ribeirão Preto, Universidade de São Paulo (USP). E-mail: camarosti@usp.br
Avenida Bandeirantes, 3900, Campus Universitário, Monte Alegre, CEP: 14040-902, Ribeirão Preto (SP), Brasil. Telefones: (16) 3315-3410/(16) 3325-4057.
[2]Student in the fifth semester of the Bachelor's Degree Program in Nursing of Escola de Enfermagem de Ribeirão Preto da USP. E-mail: ana.sara.teixeira@usp.br
[3]Student in the tenth semester of the Bachelor's and Licentiate's Degree Program in Nursing of Escola de Enfermagem de Ribeirão Preto da USP. E-mail: camiladas@hotmail.com
[4]Nurse; Professor at the Department of General and Specialized Nursing of Escola de Enfermagem de Ribeirão Preto da USP. E-mail: megumi@eerp.usp.br
Received: 08 Oct. 2015 – Approved: 11 Nov. 2015.
DOI: 10.5327/Z1414-4425201500040002

INTRODUCTION

The nursing care to surgical patients demands new technical and scientific knowledge and interpersonal skills by graduates. The implementation of the new curriculum in Escola de Enfermagem de Ribeirão Preto of Universidade de São Paulo (EERP-USP) sought the improvement of the educational process to meet the demanding needs of students, their expectations, and the continuity the construction and improvement of their knowledge for their professional training[1,2].

The planning of teaching for the mobilization and building the expertise for professional training should be made considering the contents of each subject, choosing teaching and assessment strategies based on theoretical and methodological assumptions[3,4]. For the teaching of Perioperative Nursing, there is the need to mobilize knowledge already built by students plus new knowledge to advance the construction of a specific professional knowledge, such as understanding the biological and physical process, the anesthetic-surgical procedure and healing of surgical wounds.

The pedagogical proposal of EERP-USP aims at a competency-based and integrated curriculum, seeking to prepare generalist, humanist, critical and reflective nurses, able to mobilize multiple resources (knowledge, skills and attitudes) to handle complex situations of daily work, in line with the reorientation of the World Health Organization (WHO) for the training of health professionals. This is set out in the program's Pedagogical Political Project, whose fundamental axes are Primary Health Care; the Health-Disease/Care Process; and Work Process, pedagogical framework of competences and interdisciplinarity, subsidized by the ethical foundations, the teamwork, the humanization and the active and critical-reflective teaching strategies[5-9].

The teaching-learning process, through the teaching strategies in Perioperative Nursing, sought an approach that enables a more active learning from students, with the adoption of Meaningful Learning, with specific training of patient care, who needs full nursing care through the anesthetic-surgical procedure. Thus, the university becomes a place not only to acquire knowledge, but a place where more expanded experiences are built[10].

To implement this pedagogical framework, there is a need to provide teaching-learning opportunities and experiences in which students can concretely integrate theory to their learning demands, using strategies that promote this process. Thus, some questions motivated this study: have the teaching strategies used in the Perioperative Nursing subject favored the construction of knowledge that allows the development of scientific-technical and interpersonal skills of Nursing undergraduates? Are current teaching strategies appropriate to the needs of these students?

OBJECTIVE

This study aimed to describe the evaluation of undergraduate students of Undergraduate Programs in Nursing on the teaching strategies used in the Perioperative Nursing subject at EERP-USP.

METHOD

Study design

This is an exploratory, cross-sectional study.

Study location and participants

The study was conducted at EERP-USP. A consecutive and non-probabilistic sample was composed of students of Undergraduate Programs in Nursing, of both sexes, aged over 18, regardless of social class and race, and who attended classes on the Perioperative Nursing subject in 2013. The students of the Bachelor's Degree Program attended classes on the subject in the first semester of 2013, and students of the Bachelor's and Licentiate's Degree Program attended classes on the subject in the second semester of 2013. Data collection took place between May and December 2014. Participants completed questionnaires individually.

The research project was prepared in accordance with the ethical principles of National Health Council's Resolution no. 466 of December 2012 and was approved by the Research Ethics Committee of EERP-USP, under protocol no. CAAE 27214414.9.0000.5393. Each study

participant was duly informed about the research. The participants read the Informed Consent, which was signed by the participant and the researcher after consent to participate.

Data collection

For the sociodemographic characterization of the participants, an instrument containing the following data was created: date of the interview and birth date, to calculate the age in years; sex; Nursing course (Bachelor's or Bachelor's and Licentiate's Degree program); inclusion in health services, in the nursing staff, as assistants or technicians (yes or no).

Regarding the teaching strategies used in the subjects, activities consist of the theoretical block and the practical activities in the three scenarios that permeate the perioperative period: surgical wards for patient care in the mediate pre- and postoperative, post-anesthesia recovery for patients in the immediate postoperative period and surgical center for patient care during surgery.

In the theoretical block, consisting of 30 hours in both we used as teaching strategies expository classes on the following topics: "Anesthesia", "Adult and elderly patients in the perioperative period: physiological, cognitive and affective dimensions", "The surgical wound", "Infection prevention and control in surgical patients", "Hemodynamic Monitoring", "Hemotherapy", "The organization of Perioperative Nursing care", as well as clinical practice laboratories of the theoretical concepts developed on healing and removal of stitches, surgical wound; Central Venous Pressure (CVP) and nursing care for patients with stoma.

The practical activities block consists of 120 hours for the Bachelor's Degree program and 90 hours for the Bachelor's and Licentiate's Degree program. The workload is divided equitably among the three nursing work scenarios in the perioperative period: surgical wards, post-anesthesia and surgical center – operating rooms. At the end of each stage of the practical activities, students present a case study, based on the teaching method of the course, consisting of a five-stage pedagogical cycle:

1. Reality insertion (I) – a stage in which the student, from their experiences and knowledge acquired previously, performs data collection to know people's life story, aiming to identify priorities for the perioperative nursing care, reflecting on the learning process;
2. Provisional Synthesis (PS) – in group, a discussion and synthesis of the students' experiences in the medical field is performed by identifying the priorities for the development of skills and abilities in the planning of nursing care;
3. Search for information/knowledge (S) – in various sources, supporting the understanding of the issues regarding the planning of perioperative nursing care and preparation of the case study;
4. New synthesis (NS) – in a subgroup, presentation of the case study, with consideration of the information/knowledge brought by the students, aiming to understand the problems identified and give a new meaning to the professional practice;
5. Evaluation (E) – at the end of each activity, a self-assessment, a peer assessment and an evaluation of the teacher/lecturer are conducted.

To investigate the evaluation of the undergraduate students in the Bachelor's and Bachelor's and Licentiate's Degree programs in Nursing on the teaching strategies used in the Perioperative Nursing subject, an instrument was created specifically to meet the objective of this study, with the criteria already used for the program's evaluation after it ends, which contains the following data:

- assessment of the theoretical block – expository classes based on dialogue, covering: composition of themes; time spent for each class; dynamics of the classes; subsidy for the development of practical activities and references used/indicated.
- assessment of the theoretical block – clinical practice laboratories, covering: composition of clinical practice laboratories; time spent for each laboratory; dynamics of the activities developed in the laboratories; subsidy for the development of practical activities and references used/indicated.
- practical activity block – surgical wards, covering: interaction with patients; learning and experiencing the subject's concepts: surgical stress, wound, healing, hospital and rehabilitation; organization of time and planning of activities in the mediate

and/or late pre- and postoperative; duration of practical activity in the scenario; references used/indicated; preparation, presentation and discussion of the case study.

- practical activity block – surgical center/operating rooms, covering: interaction with the multidisciplinary team; learning and experiencing the subject's concepts: anesthesia, electrosurgery, surgical scrub and room preparation; organization of time and planning of activities during surgery; realization of preoperative visit; duration of practical activity in the scenario; references used/indicated; preparation, presentation and discussion of the case study.
- practical activity block – post-anesthetic recovery, covering: interaction with the patient; learning and experiencing the subject's concepts: anesthesia, preparation of the unit and patient admission, initial evaluation and systems and criteria for discharge/transfer of recovery; organization of time and planning of activities in the immediate postoperative period; duration of the practical activity in the scenario; references used/indicated; preparation, presentation and discussion of the case study.

To respond to each of the blocks, a five-point ordinal scale, like Likert's, was set up, in which (1) means bad, (2) regular, (3) good, (4) very good and (5) excellent. The evaluation of the results was obtained by the description of the frequencies found in each of the items.

Data processing and analysis

Data were first inserted in the Office Excel 2010® software with the technique of double entry of the responses received and subsequent validation. After the validation of the database, they were transferred to Statistical Package for the Social Sciences® (SPSS), version 17.0, for descriptive analysis of the study variables. Descriptive analyses of simple frequency were held for nominal or categorical variables, central tendency (mean and median) and dispersion (standard deviation – SD) for the continuous variables.

RESULTS

The number of students enrolled in the programs was 130 (80 from the Bachelor's Degree program and 50 from the Bachelor's and Licentiate's Degree program); 39 students participated in the study.

The sociodemographic characteristics of participants is shown in Table 1.

The average age of the participants was 25.13 years (SD=3.75), with a minimum of 21.3 and a maximum of 38.8 years.

Table 2 shows the students' evaluation of the dialogue-based expository classes.

It can be observed that most students evaluated the composition of the theoretical block, the duration of each class, the class dynamics and the subsidy that the classes offered for the development of practical activities as "good" or "very good". The references used and indicated on the classes were evaluated by most students as "very good" and "excellent".

Table 3 shows the students' evaluation of the clinical practice laboratories.

Students evaluated the composition of the clinical practice laboratories mostly as "good" and "excellent". The "dynamics of the activities developed in the laboratories" and "subsidy that laboratories provided for the development of practical activities" were evaluated as "good" and "very good" by the majority. The item "duration of each laboratory" was rated by most as "regular" and "good".

Tables 4 to 6 show the students' evaluations of the practical activities in the scenarios that permeate the perioperative period.

Table 1. Sociodemographic characteristics of the participants, according to the total sample (n=39). Ribeirão Preto, from May to December, 2014.

Variable	Total sample (n=39) n (%)
Sex	
Female	38 (97.4)
Undergraduate program in Nursing	
Bachelor's and Licentiate's Degree	24 (61.5)
Bachelor's Degree	15 (38.5)
Worked as a nursing assistant*	
No	33 (84.6)
Worked as a nursing technician**	
No	33 (84.6)

*Five participants did not respond; **Six participants did not respond.

Table 2. Evaluation of the dialogue-based theoretical classes, according to the total sample (n=39). Ribeirão Preto, from May to December, 2014.

Evaluation criteria	Bad n (%)	Regular n (%)	Good n (%)	Very good n (%)	Excellent n (%)
Composition of the topics of the theoretical block	0	3 (7.7)	13 (33.3)	17 (43.6)	6 (15.4)
Duration of each lesson	2 (5.1)	5 (12.8)	24 (61.5)	6 (15.4)	2 (5.1)
Dynamics of classes	2 (5.1)	5 (12.8)	18 (46.2)	11 (28.2)	3 (7.7)
Subsidy for the development of practical activities	2 (5.1)	5 (12.8)	18 (46.2)	8 (20.5)	6 (15.4)
Used and indicated references	0	0	9 (23.1)	15 (38.5)	15 (38.5)

Table 3. Evaluation of the clinical practice laboratories, included in the theoretical block, according to the total sample (n=39). Ribeirão Preto, from May to December, 2014.

Evaluation criteria	Bad n (%)	Regular n (%)	Good n (%)	Very good n (%)	Excellent n (%)
Composition of clinical practice laboratories	1 (2.6)	8 (20.5)	12 (30.8)	8 (20.5)	10 (25.6)
Duration of each laboratory	3 (7.7)	10 (25.6)	13 (33.3)	9 (23.1)	4 (10.3)
Dynamics of the activities developed in the laboratories	2 (5.1)	6 (15.4)	12 (30.8)	11 (28.2)	8 (20.5)
Subsidy for the development of practical activities	1 (2.6)	3 (7.7)	16 (41.0)	12 (30.8)	7 (17.9)
Used and indicated references	0	5 (12.8)	8 (20.5)	12 (30.8)	14 (35.9)

Table 4. Evaluation of the practical activities related to surgical wards, according to the total sample (n=39). Ribeirão Preto, from May to December, 2014.

Evaluation criteria	Bad n (%)	Regular n (%)	Good n (%)	Very good n (%)	Excellent n (%)
Interaction with patients	1 (2.6)	1 (2.6)	6 (15.4)	23 (59.0)	6 (15.4)
Learning and experiencing the concepts of the subject: surgical stress, surgical wound, healing, hospital release and rehabilitation	1 (2.6)	4 (10.3)	5 (12.8)	21 (53.8)	8 (20.5)
Organization of time and planning of activities in the mediate and/or late pre- and postoperative period	1 (2.6)	1 (2.6)	15 (38.5)	16 (41.0)	6 (15.4)
Duration of the practical activity in the scenario	2 (5.1)	5 (12.8)	13 (33.3)	15 (38.5)	4 (10.6)
Used and indicated references	0	0	11 (28.2)	17 (43.6)	11 (28.2)
Preparation, presentation and discussion of the case study	0	4 (10.6)	11 (28.2)	16 (41.0)	8 (20.5)

Table 5. Evaluation of activities related to the surgical center, according to the total sample (n=39). Ribeirão Preto, from May to December, 2014.

Evaluation criteria	Bad n (%)	Regular n (%)	Good n (%)	Very good n (%)	Excellent n (%)
Interaction with the multidisciplinary team	3 (7.7)	9 (23.1)	14 (35.9)	8 (20.5)	4 (10.3)
Learning and experiencing of the subject's concepts: anesthesia, electrosurgery, surgical scrub and organization of the room	0	3 (7.7)	14 (35.9)	10 (25.6)	12 (30.8)
Organization of time and planning of activities during surgery	2 (5.1)	2 (5.1)	20 (51.3)	10 (25.6)	5 (12.8)
Preoperative visit	3 (7.7)	4 (10.6)	15 (38.5)	10 (25.6)	7 (17.9)
Duration of the practical activity in the scenario	3 (7.7)	7 (17.9)	15 (38.5)	8 (20.5)	6 (15.4)
Used and indicated references	0	0	13 (33.3)	15 (38.5)	11 (28.2)
Preparation, presentation and discussion of the case study	0	1 (2.6)	13 (33.3)	15 (38.5)	10 (25.6)

Table 6. Evaluation of the practical activities related to post-anesthetic recovery, according to the total sample (n=39). Ribeirão Preto, from May to December, 2014.

Evaluation criteria	Bad n (%)	Regular n (%)	Good n (%)	Very good n (%)	Excellent n (%)
Interaction with the patient	1 (2.6)	4 (10.3)	12 (30.8)	14 (35.9)	8 (20.5)
Learning and experiencing the subject's concepts: anesthesia, patient preparation, initial assessment and systems, criteria for discharge/transfer of recovery	1 (2.6)	1 (2.6)	10 (25.6)	17 (43.6)	10 (25.6)
Organization of time and planning of activities in the immediate postoperative period	1 (2.6)	3 (7.7)	13 (33.3)	16 (41.0)	6 (15.4)
Duration of the practical activity in the scenario	2 (5.1)	7 (17.9)	13 (33.3)	11 (28.2)	6 (15.4)
Used and indicated references	0	0	8 (20.5)	19 (48.7)	12 (30.8)
Preparation, presentation and discussion of the case study	0	1 (2.6)	10 (25.6)	18 (46.2)	10 (25.6)

It was observed that the students rated as "very good", more often, all items related to practical activities developed in surgical wards.

Regarding the evaluation of activities conducted in the surgical center, the students rated as "good", more often, the interaction with the multidisciplinary team, learning and experiencing the concepts of the subject - anesthesia, electrosurgery, surgical scrub and preparation of the room, the organization of time and planning activities during surgery, performing the preoperative visit and the duration of the practical activity in the scenario. The items on the references used and indicated, as well as the preparation, presentation and discussion of the case study, were evaluated more often as "very good".

In the evaluations related to the practical activities in the post-anesthetic recovery period, the duration of the practical activity was assessed more frequently as "good", while all other items were assessed more frequently as "very good".

DISCUSSION

The teaching strategies used in the Perioperative Nursing subject were well evaluated by the students of the Bachelor's Degree and Bachelor's and Licentiate's Degree programs in Nursing. No similar studies were found in the literature, that is, which investigated the evaluation by students of the teaching strategies used in the program. However, we found studies that evaluated the evolution of Perioperative Nursing education in Nursing graduate programs in Brazil[10,11].

In one study, researchers evaluated the trends of the teaching of Perioperative Nursing care[10]. Teachers from ten undergraduate programs in Nursing, in the city and the metropolitan region of São Paulo, participated in the study in 2002. The researchers found that the theoretical workload in the surgical center varied between 30 (80%) and 72 hours (20%), and the practical workload, 60 (60%) and 90 hours (40%), similar to the workload in EERP-USP The theoretical contents on Perioperative Nursing care were addressed in a theoretical block in 70% of cases and, in 30% of cases, were addressed during the development of the subject. With regard to the practical activities on Perioperative Nursing care, 50% of the programs developed them during the surgical center stage.

Regarding the topics covered to support the teaching of Perioperative Nursing Care, were explicit in the objectives of the subjects evaluated in the study the intentions to identify, characterize and understand the physical and organizational aspects and the facilities of the Surgical Center (SC), Sterilized Material Center (SMC) and Post-anesthesia Recovery (PAR), as well as the types, stages and complications of anesthesia and surgery. Specifically as to the content, were identified the circulation of operating rooms; surgical instrumentation; antimicrobial procedures; the technical procedures for anesthesia, hemostasis, positions and instruments of the operating room; the effects surgical and anesthetic

trauma; surgical treatments; terminology; surgical time; antisepsis; the surgical environment; and recognition and reprocessing of materials[10].

Another study investigated how the operating room content is offered in 159 Brazilian institutions for undergraduate education in nursing. The average total workload of the course was 94.7 hours (SD=80 hours); average theoretical workload of 56.1 hours (SD=29.9) and average practice time of 42.3 hours (SD=33.2). The study also identified that, in 32.7% of the courses, there is no specific discipline that addresses the Perioperative Nursing – that content is dispersed into other subjects[11].

Based on these data, we consider relevant a discussion on the importance of this subject in the training of the generalist nurse. The Brazilian Curriculum Guidelines for Undergraduate Programs in Nursing[12] ensure freedom to higher education institutions in the composition of the workload for the completion of the curricula, causing a lack of specificity as to the skills and abilities that should make up the training of the generalist nurse[11].

We agree with the researchers' claim that, in an attempt to simultaneously comply with the minimum workload of the programs and health policies, some content, such as operating room, tend to be unsuccessful, as if it were less valuable in nursing education[13]. In addition, there is still not a consensus on the concept of the generalist nurse, and operating room-related content has been considered, in many programs, a specialty[13].

Faced with these questions, we found a study that aimed to know the opinion of nurses about the need for the Operating Room subject in undergraduate programs in Nursing to support the theoretical and practical knowledge in care. A total of 50 nurses from different areas were interviewed, divided into two groups: G1 consists of 25 nurses who had training in the perioperative subject, and G2 with 25 who did not have the subject. The results showed that 100% of the G1 nurses and 92% of G2 stated that this subject should be included in the curriculum because it allows the development of knowledge for a quality care, offering greater opportunity of operation. The authors also concluded that the exclusion of this discipline in some Nursing undergraduate curricula in Brazil left a gap in the Nursing education, leading to reconsider the inclusion in the curriculum[14].

We believe that the importance of the Perioperative Nursing subject in the Nursing programs is due to the fact that the student needs to understand that surgery is a crisis situation for the patient and family, regardless of the surgery classification, because there are always consequences that imply changes in the dynamics of the daily lives of these people, and new needs arise, requiring family, professional and social reorganization, with adequacy of the demands regarding the conditions and capabilities of the people involved. Patients perceive the risk of death, loss of organs, the financial losses, the discomfort from the hospital, family separation, suffering, pain and insecurity as real threats and, for the student, this experience is necessary to enable them to better handle these clinical situations.

In addition, we must consider that the technological advances in surgery, the complexity of care and the vulnerable state of the surgical patient require that the work of nurses in these areas is backed by clear knowledge of their performance and of the concept that our aim is to carry out perioperative assistance for the success of a safe surgical anesthesia[11].

We considered as limitations of this study the small number of students who participated in the survey. As we choose to interview them after the program, in a moment when they were already in their traineeship, we found it difficult to schedule appointments in person at the university, once the largest workload at this point is developed in the practical field. In addition, we also list as limiting the cross-sectional design. A reassessment of the teaching strategies used in the perioperative subject is important after these students graduate, when they will be active in the labor market.

CONCLUSION

The teaching strategies used in the Perioperative Nursing subject, made up of the theoretical block with dialogue-based expository classes and the development of clinical practice laboratories, as well as practical activities in the three scenarios that permeate the perioperative period, have been well evaluated by the majority of undergraduate students in the Bachelor's Degree and Bachelor's and Licentiate's Degree programs.

REFERENCES

1. Lopes ND, Teixeira E, Vale EG, Cunha FS, Xavier IM, Fernandes JD, et al. Um olhar sobre as avaliações de Cursos de Graduação em Enfermagem. Rev Bras Enferm. [Internet]. 2008 Feb [cited 2015 May 13];61(1):46-53. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-71672008000100007&lng=en

2. Smeltzer SC, Bare BG, Hinkle JK, Cheever KH. Tratado de enfermagem médico-cirúrgica. 12. ed. Rio de Janeiro: Guanabara Koogan; 2011.

3. Libaneo JC. Tendências pedagógicas na prática escolar. In: Libaneo JC. Democratização da escola pública: a pedagogia crítico-social dos conteúdos. São Paulo: Edições Loyola; 1984. p. 19-44.

4. Madeira MZA, Lima MGSB. A prática pedagógica das professoras de enfermagem e os saberes. Rev Bras Enferm. [Internet]. 2007 Aug [cited 2015 May 13];60(4):400-404. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-71672007000400008&lng=en

5. Deluiz N. O modelo das competências profissionais no mundo do trabalho e na educação: implicações para o currículo. Boletim Técnico do Senac. 2001;27(3):13-25.

6. Escola de Enfermagem de Ribeirão Preto da Universidade de São Paulo. Graduação. Bacharelado. Projeto Pedagógico. [Internet]. 2015 [cited 2015 March 16]. Available from: http://www.eerp.usp.br/

7. Escola de Enfermagem de Ribeirão Preto da Universidade de São Paulo. Graduação. Bacharelado e Licenciatura. Projeto Pedagógico. [Internet]. 2015 [cited 2015 March 16]. Available from: http://www.eerp.usp.br/

8. Mitre SM, Siqueira-Batista R, Mendonça JMC, Mendonça NMM, Meirelles CAB, Porto CP, et al. Metodologias ativas de ensino-aprendizagem na formação profissional em saúde: debates atuais. Ciênc Saúde Coletiva [Internet]. 2008 Dec [cited 2015 May 13];13(Suppl 2):2133-44. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1413-81232008000900018&lng=en

9. Saviani D. Pedagogia histórico-crítica: primeiras aproximações. 11. ed. Campinas: Autores Associados; 2011. 137 p.

10. Avelar MCQ, Silva A. Assistência de enfermagem perioperatória: ensino em cursos de enfermagem. Rev Esc Enferm USP. [Internet]. 2005 Mar [cited 2015 May 13];39(1):46-52. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0080-62342005000100006&lng=en

11. Turrini RNT. Ensino de Enfermagem em Centro Cirúrgico nos cursos de Bacharelado em Enfermagem no Brasil [dissertation]. São Paulo: Escola de Enfermagem da Universidade de São Paulo; 2012. Doctor of Medicine. Portuguese.

12. Brasil. Ministério da Educação; Conselho Nacional De Educação. Parecer CNE/CES 1133/2001. Dispõe sobre as Diretrizes Curriculares Nacionais dos Cursos de Graduação em Enfermagem. Diário Oficial da União, Brasília, 10 mar. 2001. Seção 1E. p.113.

13. Turrini RNT, Costa ALS, Peniche ACG, Bianchi ERF, Cianciarullo TI. Ensino de Enfermagem em Centro Cirúrgico: transformações da disciplina na Escola de Enfermagem da USP (Brasil). Rev Esc Enferm USP. [Internet]. 2012 Oct [cited 2015 May 13];46(5):1268-73. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0080-62342012000500032&lng=en

14. Paoli MD, Caregnato RCA, Milão LF. Repensar a disciplina de centro cirúrgico na formação do enfermeiro. Nursing (São Paulo). 2007;9(106):136-41.