

COLLECTIVE CONSTRUCTION OF STRATEGIES FOR A PROGRAM OF CONTINUING EDUCATION IN LIVER TRANSPLANTATION

Construcción colectiva de estrategias para un programa de educación permanente en transplante hepático

Construção coletiva de estratégias para um programa de educação permanente em transplante hepático

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ABSTRACT: Objective: Find out educational strategies, along with the nursing team, to be able for elaborate a plan of educational actions in liver transplantation for surgical center nursing. **Method:** Exploratory, descriptive, qualitative research, carried out in a school hospital in southern Brazil, approved by the human research ethics committee. **Results:** 16 members of the liver transplantation team took part in this research, and by analyzing the context, three categories emerged: knowledge of the whole liver transplantation process; appropriation of perioperative nursing care in liver transplantation; and integration and qualification of the interdisciplinary team. **Conclusion:** We expect that this research will help other transplantation centers, as it is significantly deep regarding the implementation of services. It is based on a methodological framework to support the practice, configuring it as a scientific instrument for the development of activities and the formation of continuing education programs, according to the needs of the teams working with this reality.

Keywords: Liver transplantation. Continuing education. In-service training. Surgery center nursing.

RESUMO: Objetivo: Identificar, junto à equipe de enfermagem, estratégias educativas para a composição de um plano de ações educacionais em transplante hepático para a enfermagem do centro cirúrgico. **Método:** Pesquisa exploratória, descritiva, qualitativa, realizada em um hospital escola da região sul do país, aprovada pelo comitê de ética em pesquisas envolvendo seres humanos. **Resultados:** Participaram 16 integrantes da equipe de transplante hepático, sendo que na análise de conteúdo emergiram três categorias: conhecimento de todo o processo de transplante hepático; apropriação dos cuidados de enfermagem perioperatória em transplante hepático; e integração e qualificação da equipe interdisciplinar. **Conclusão:** Deseja-se que esta pesquisa sirva de auxílio para outros centros transplantadores, sendo significativo o aprofundamento no que concerne à implantação do serviço com embasamento em um referencial metodológico para alicerçar a prática, configurando-o como um instrumento científico para o desenvolvimento das atividades e a formação de programas de educação permanente, de acordo com as necessidades das equipes que atuam com essa realidade.

Palavras-chave: Transplante hepático. Educação continuada. Capacitação em serviço. Enfermagem de centro cirúrgico.

RESUMEN: Objetivo: Identificar junto con el equipo de enfermería las estrategias educativas para la composición de un plan de acciones educacionales en el trasplante hepático para la enfermería del centro quirúrgico. **Método:** Investigación exploratoria, descriptiva y cualitativa realizada en un hospital escuela de la región sur del país y aprobada por el comité de ética en investigaciones con seres humanos. **Resultados:** Participaron 16 integrantes del equipo de trasplante hepático, siendo que en el análisis del contenido surgieron tres categorías: conocimiento de todo el proceso de trasplante hepático, apropiación de los cuidados de la enfermería perioperatoria en el trasplante hepático e integración y calificación del equipo interdisciplinario. **Conclusión:** Se desea que esta investigación sirva de auxilio para otros centros de trasplantes, siendo significativo el ahondamiento en relación a la implantación del

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Received: 09/11/2017 – Approved: 04/14/2018

DOI: 10.5327/Z1414-4425201800030002

servicio con fundamento en un referente metodológico para cimentar la práctica, configurándola como un instrumento científico para el desarrollo de las actividades y la formación de programas de educación permanente y de acuerdo con las necesidades de los equipos que actúan con esa realidad.

Palabras clave: Transplante de hígado. Educación continuada. Capacitación em servicio. Enfermería de quirófano.

INTRODUCTION

The National Policy of Continuing Education in Health, in force since 2004, was created as a strategy to transform practice¹. Good health practices require an organizational system related to in-service and continuing education. In this perspective, continuing education enfold to the process, the teaching, and the care management, and should be adopted as a daily practice, in a reflective way².

Therefore, continuing education is a tool to update theoretical-practical knowledge of nursing professionals working in transplantation services, and implement upgraded interventions directed to the main needs of patients in liver transplantation. This is understood as the constant search for knowledge, as one of the actions that makes possible the development of the process of change and that aims at the professional nursing qualification and, consequently, the accomplishment of competent, conscious, and responsible professional practice³.

The nursing team that works in the process of organ and tissue transplantation needs a broad technical and scientific knowledge since the general context of the procedure is complex and constantly updated. In this scenario, it is incumbent upon nurses to participate in the organization and development of an effective and efficient transplantation program, in order to promote quality care through technologies, logistics, and human resources, and improve coordination, assistance, continuing education, and research activities⁴.

The preparation of the surgical center (SC) health team promotes patient safety, since it avoids exposure to the risk of incidents and adverse events during surgery, specifically considering the intraoperative period for the liver transplantation process. In this sense, there is a need to create training programs for nursing professionals, establishing dynamic and contextualized educational methods.

Thus, the problem of this study is: Which educational strategies can be part of a continuing education program on care and routines in the intraoperative period of liver transplantation for nursing professionals?

OBJECTIVE

Find out educational strategies, along with the nursing team, to be able for elaborate a plan of educational actions in liver transplantation for SC nursing.

METHOD

This is an exploratory, descriptive, qualitative study⁵, developed in the SC of a school hospital in Southern Brazil, from November to December 2016.

This given institution offers a liver transplantation service, implemented in November 2011, with an average of 1.22% transplantations a month, which up to June 2017 carried out 85 transplantations and had 106 patients subscribed to the program⁶.

In order to perform the service, there is a routine of actions and care developed by the entire health team, especially by nursing, which is the object of this study. The work routine concerns the aspects of: organization of the liver transplantation team; preparation of the operating room for the surgical procedure; approach of the recipient patient in the hospitalization unit; preparation of the recipient patient; performance of surgical procedures and nursing care at in the immediate postoperative period in the post-anesthetic recovery room.

Participants in this study were nursing professionals who met the following inclusion criteria: being a professional of the nursing team in liver transplantation in the SC, with at least one month of experience in the study scenario. Exclusion criteria were: professionals who were on leave during the data collection period due to medical reasons or vacation.

All participants were invited individually and personally. Those who agreed to participate received explanations on the research objectives, risks, and benefits, as well as the aspects related to confidentiality and anonymity. All those who accepted the invitation signed the Informed Consent Form (ICF).

For data collection, we used audio recorded semi-structured interviews, transcribed by the main researcher and later validated by participants. Data analysis focused on

content and was organized in: pre-analysis; exploration of the material; and treatment, inference, and interpretation of results⁷.

The analysis of the interviews was a plan presented to participants, in person and by e-mail, who provided comments that allowed for the diagnosis of theme priorities and the identification of educational strategies for the creation of a continuing education program.

The Research Ethics Committee with Human Beings of *Universidade Federal de Santa Catarina* (UFSC) approved this research, Report No. 1.960.236 and Certificate of Presentation for Ethical Consideration (*Certificado de Apresentação para Apreciação Ética – CAAE*) No. 61511416.0.0000.0121.

In order to respect the confidentiality and anonymity of the research participants, we decided to identify them by the letter P, followed by a sequential number, until completing the number of participants (P1 to P16).

RESULTS

Six nurses, seven nursing technicians, two nursing assistants, and one scrub nurse attended the study, totaling 16 members of the liver transplantation team, 13 females and 3 males. Regarding age groups: 3 participants are between 21 and 30 years old; 6 between 31 and 40 years; 2 between 41 and 50 years; 4 between 51 and 60 years; and 1 with more than 61 years.

Seven of them have been in the transplant team for a year; four from one year and one month to four years; and five have been working with transplants since the inauguration of the service, that is, for six years.

As for the level of education, 12 had completed higher education, 7 of whom in health areas; 4 are nursing technicians; 3 have master's degrees; 7 have specializations; 2 are master's students; and 1 is studying for a different health area.

From the data analyzed, three categories emerged for discussion: knowledge of the whole liver transplantation process; appropriation of perioperative nursing care in liver transplantation; and integration and qualification of the interdisciplinary team.

Knowledge of the whole liver transplantation process

It is important to emphasize the need for the team's knowledge of and approach to the whole process of liver transplantation,

as an essential tool for the integrality of actions and care developed, as expressed by the participants.

It is necessary to know it all... the medical history of the patient, the cause for the need of transplantation. During surgery, we need to be aware of the hemodynamics of the patient, signs of severe bleeding. We must record the start of the surgery, clamping time, ischemia time until the implant of the new liver, laboratory test results, in addition to the origin of the new liver (P11).

It is essential to know the whole organ donation process and transplant logistics (P12).

The attendants recognize and understand the context of transplant, but they feel the need to further their knowledge of the logistics, the donation and organ procurement processes, and surgical intervention of the transplant itself for the success of the procedures. It should be noted that the implementation of training for all categories of nursing is a rather assertive decision since these professionals are in lack of updates for their scientific knowledge and are very receptive to future training.

Appropriation of perioperative nursing care in liver transplantation

The participants point out the need for the nursing team to be qualified in order to provide care, find out and define priorities during liver transplantation and acting in case of complications and aspects related to the systematization of nursing care, including nursing diagnoses. They also include the management of new technologies for the appropriation of this care and suggest strategies for improvement in professional qualification.

It is necessary to participate in symposiums, Brazilian Transplant Conference. Courses on pre-, intra-, and post-transplant nursing care, nursing diagnoses (P5).

We were trained on the use of the autotransfusion machine — a responsibility of the nurse —, which considerably facilitated its handling during transplants considerably (P15).

For the appropriation of this care, they also highlight the need to know the medical history of the

patient undergoing the procedure. Pertinent information, such as: gender, age, previous and underlying diseases (P7).

We need information, training, courses, lectures, seminars, knowledge on the subject we are developing together with the team; to visit other hospitals and services to be qualified; to offer technical and graduation courses for employees; to make clear the beginning, middle, and end of the procedure; to have meetings to evaluate the work done, patients, and accidents (P9).

Participants in the study indicated the need to increase knowledge about the donation and transplantation processes. They commented on how one is included in the team and how the educational process occurs, regarding the needs of the subjects, and suggested educational proposals aimed at the qualification of professionals for a safe and quality care.

Integration and qualification of the interdisciplinary team

Participants reinforce the relevance of the interdisciplinary team's performance for the success and safety of the liver transplantation process. In order to carry out this safe and competent care, the qualification of members is an essential premise highlighted by all participants in this study, represented by the following statements.

I see my performance in liver transplantation as professional; each team has its importance in the process, and if they are not integrated, it is difficult. They must be harmonious, well-trained, and secure in their ever-evolving roles (P8).

Of course, transplant education has to be improved, because what we have learned has been taught by other colleagues, we have not taken courses, training sessions, or anything like that. We have learned in practice (P2).

Every professional who participates in liver transplantation should attend specific training for the procedure, which includes patient preparation, surgical procedure, and surgical times (P4).

The interviewees also point out that these training sessions should have continuity and be in line with the needs of the team.

I believe that meetings, talks, and training sessions should be carried out routinely. Even for those in the team who are already experienced since we can always learn new things to improve our service, but especially for those who are starting, so they can better understand the work (P6).

In this process, the nursing team highlights the nurse as a link between the entire team, articulating, guiding, supervising, solving problems, and assisting all as needed. Finally, nurses favor the integration and safety of the procedure, both for the team and the patient.

The nurse's role is very important. We are the ones who have the first contact with the patients and their relatives in order to talk to them about the surgery. During surgery, we must be aware of the whole movement in the room to solve possible complications as they arise and to organize the team (P11).

The role of the nurse is essential within the multi-professional team since he or she acts in the prevention, treatment, and rehabilitation of the transplant patient, paying attention to the patient's physical and emotional well-being, as well as making a link between patient, family, and other health professionals. This care, performed in a humanized way, allows patients and their relatives, in a moment of fragility, to feel supported and protected (P6).

All professionals who work in transplantation are important, but I see the role of the nurse, in all processes, aimed at disseminating and demystifying the transplant theme, and the link between surgical and nursing teams, family members, donor, and recipient is of great value (P12).

The exchange between the various successful experiences was pointed out by the attendants as a strategy of continuing education due to shared knowledge and experiences in the area.

It is good to have the opportunity of experiencing and learning about it and with other realities and institutions that also perform transplants through lectures, courses, training sessions, and simulations (P15).

I think the hospital could have sent us to other transplantation centers, just to understand how it worked. I see that they do not care about human resources here at the hospital. Even the anesthetic team should have been trained (P1).

DISCUSSION

The qualification of professionals for competent practice in liver transplantation figures as being essential, and there is a need to include educational programs in transplantation services, with the objective of exchanging knowledge and experiences⁸. What we can observe, however, is the existence of several studies focusing on the pre- and postoperative periods, dealing with nursing care, protocol and routines creation, both in nursing and in interdisciplinary areas^{4,9-11}.

Patient needs are identified based on knowledge about nursing care in the period preceding transplantation, complications in transplantation, and post-transplant care as the greatest one of those needs. There are also other needs, though patients show less interest in them, such as explanations on the medications after transplantation; the workings of the waiting list; indications and contraindications for transplantation; organ distribution system; and the model for end-stage liver disease (MELD). Effective teaching in the perioperative period promotes several benefits for patients throughout the process, namely: decreased hospital stays, reduction of analgesics, and increased patient and relatives satisfaction¹².

Transplant patients' caregivers focus their attention on postoperative care, noting that the ideal information means for learning about these aspects should include consultations with nurses and physicians, manual reading, and discussion groups⁹.

Professional qualification involves the preparation and compliance with nursing care protocols, which contribute to the standardization of activities of transplant teams¹⁰. These protocols may add to the recording of information

about the medical history of the patient undergoing the procedure (name, gender, age, previous and current morbid history, origin, medical diagnosis, blood type, weight, name of the family member accompanying them, data on the hospital stay and bed reservation in the intensive care unit – ICU). Nursing care for transplant patients admitted to ICU was restricted to compliance with the medical prescription, and there was no instruction for their care¹¹. In this sense, the subjects recommended the implementation of the systematization of nursing care (*sistematização da assistência de enfermagem – SAE*) and the creation/use of nursing care protocols for transplant patients hospitalized in ICU, in order to contribute to the quality of nursing care¹⁰.

The attendants find out the improvement the improvement and understanding of all the logistics of the organ donation process up to the transplant as subjects that need more in-depth studies to improve the quality of care and provide a solid basis. That would make the new knowledge, practices, and attitudes efficient and safe, turning the participants into qualified professionals¹³.

In this context, interdisciplinary work favors continuity of care and compliance with the principle of integrality. Thus, different professionals share their knowledge and provide full care^{14,15}. It should be emphasized that the multidisciplinary team also performs post-discharge care guidelines and outpatient follow-up, minimizing the risks of adverse effects and hazards to the patient, in the face of the new medications used, preventing and promoting greater patient safety¹⁶. Subjects in this research perceived interdisciplinary work, as well as continuing training in liver transplantation for all personnel as necessary.

The development of training programs for transplant services is essential. The participants also confirm that the role played by nurses is decisive in relation to the multi-professional team, being a reference in the organization of the whole structure and process¹⁷. The nurse is the connection between other professionals, patients, and their relatives. The implementation of protocols for nursing care is a technology that translates safety and effectiveness into the professionals' work. The entire team recognized nurses as essential members of the whole process, as they are the ones who plan, coordinate, manage, and organize all the logistics so that liver transplantations can be successful throughout their various stages. Thus, nurses are the link between their team, patients, and their relatives, providing quality nursing care. They are also the

professionals who work in care management, promoting continuing education and improving the quality of care, concerning ethical and social aspects^{12,16}. The restrictions imposed by the realities of transplantation centers, and the reduced number of professionals, materials, and financial resources limit the nurse's dynamics in providing safe and quality care¹².

In the national context, Directive No. 356 of March 10, 2014, published by the Ministry of Health, concerns good practices in procedures for the organization and operation of organ transplantation services, including the training of all members of the team and an interdisciplinary work, that is, a team, consisting of several specialties, engaged in a single focus, the patient; seeking work safety¹⁸.

The implementation of continuing education is a good strategy to qualify professionals since all those involved critically analyze their activities, highlighting problems and developing better understanding and appreciation of the practice, with the standardization of care. In this sense, practice is the source of scientific knowledge, understanding that continuing education should be part of the professional health context since it provides the empowerment to turn problems into tools to improve care^{19,20}. Parallel to in-service education, the standardization of nursing care, through collective construction and research, makes professional practice safe²¹.

Thus, the creation of new technologies for standardization of care, that is, the creation of standardization through a standard operating procedure (SOP), and the organization and implementation of SAE focused on the intraoperative period, have an impact on the work process, structuring the activity and balancing the service. These technologies make the practice more effective and efficient, generating control over the practice of care.

Other strategies also emerge from the statements, such as: implementation of the liver transplantation week in the institution, with the organization of courses and lectures; technical visits to institutions performing liver transplantation,

in person or by videoconference, with themes focused on the interaction between transplant teams, interpersonal interaction, and internships in other centers; interdisciplinary and continuing training; preparation of manuals for in-service consultation; technical courses for the nursing team; participation in events (transplant congresses and conferences; symposium of immunosuppression specialists); and creation of an agenda of meetings with the participation of all professionals.

The strategies listed require a cooperative effort between the professionals of the transplant team and the institution since they depend on a reorganization of the service. Thus, it is important to emphasize the need for an institutional change that promotes the preparation of professionals, qualifying them through continuing training based on the needs of the service revealed by the work team²².

FINAL CONSIDERATIONS

Nursing practice boosts methods that facilitate care; and the implementation of educational activities in the professional's everyday life projects the know-how in a systematic, scientific, and quality way, standardizing nursing behaviors, and providing greater security in the actions performed. The educational proposal serves as a tool to aid the teaching-learning process and scientific research.

The limitation found was the shortage on educational materials in the nursing area for professionals who work in the intraoperative period of liver transplantation.

Due to the complexity of the theme, we expect that this research will serve as an aid to other transplant centers, as it is significantly deep regarding the implementation of services. It is based on a methodological framework to support the practice, configuring it as a scientific instrument for the development of activities and the formation of continuing education programs, according to the needs of the teams working with this reality.

REFERENCES

1. Brasil. Ministério da Saúde. Secretaria de Gestão do Trabalho e da Educação na Saúde. Departamento de Gestão da Educação em Saúde. Política Nacional de Educação Permanente em Saúde. Brasília: Ministério da Saúde; 2009. 64p.
2. Baldissera VDA, Bueno SMV. A educação permanente em saúde e a educação libertária de Paulo Freire. *Ciênc Cuid Saúde*. 2014 Abr/Jun;13(2):191-2. <http://dx.doi.org/10.4025/ciencucuidsaude.v13i2.26545>

3. Jesus MCP, Figueiredo MAG, Santos SMR, Amaral AMM, Rocha LO, Thiollent MJM. Permanent education in nursing in a university hospital. *Rev Esc Enferm USP* [Internet]. 2011 Out [citado em 10 abr. 2018];45(5):1229-36. Disponível em: <http://dx.doi.org/10.1590/S0080-62342011000500028>
4. Mendes KDS, Roza BA, Barbosa SFF, Schirmer J, Galvão CM. Transplante de órgãos e tecidos: responsabilidades do enfermeiro. *Texto Contexto Enferm* [Internet]. 2012 Dez [citado em 10 abr. 2018];21(4):945-53. Disponível em: <http://dx.doi.org/10.1590/S0104-07072012000400027>
5. Polit DF, Beck CT. *Fundamentos de pesquisa em enfermagem: avaliação de evidência para a prática da enfermagem*. 7ª ed. Porto Alegre: Artmed; 2011.
6. Brasil. *Relatórios anuais transplante equipe Hospital Universitário de Santa Catarina*, 2017. Brasília; 2017. [citado em 17 mar. 2018]. Disponível em: <https://snt.saude.gov.br>
7. Minayo MCS. *O desafio do conhecimento: pesquisa qualitativa em saúde*. 14ª ed. São Paulo: Hucitec; 2014.
8. Morais TR, Morais MR. Doação de órgãos: é preciso educar para avançar. *Saúde Debate* [Internet]. 2012 Dez [citado 10 abr. 2018];36(95):633-9. Disponível em: <http://dx.doi.org/10.1590/S0103-11042012000400015>
9. Mendes KDS, Rossin FM, Ziviani LC, Castro-e-Silva O, Galvão CM. Necessidades de informação de candidatos ao transplante de fígado: o primeiro passo do processo ensino-aprendizagem. *Rev Gaúcha Enferm* [Internet]. 2012 Dez [citado em 10 abr. 2018];33(4):94-102. Disponível em: <http://dx.doi.org/10.1590/S1983-14472012000400012>
10. Marandola PG, Matos SS, De Mattia AL, Rocha ADM, Silva JS, Resende MKB. Consulta de enfermagem ao paciente em pré-transplante de fígado: elaboração de um protocolo. *Rev Enferm Centro Oeste Mineiro*. 2011;1(3):324-31. <http://dx.doi.org/10.19175/recom.v0i0.62>
11. Borges MCLA, Silva LMS, Guedes MVC, Caetano JA. Desvelando o cuidado de enfermagem ao paciente transplantado hepático em uma Unidade de Terapia Intensiva. *Esc Anna Nery* [Internet]. 2012 Dez [citado em 10 abr. 2018];16(4):754-60. Disponível em: <http://dx.doi.org/10.1590/S1414-81452012000400016>
12. Silva AS, Valácio RA, Botelho FC, Amaral CFS. Fatores de atraso na alta hospitalar em hospitais de ensino. *Rev Saúde Pública* [Internet]. 2014 Jun [citado em 10 abr. 2018];48(2):314-321. Disponível em: <http://www.scielo.br/pdf/rsp/v48n2/0034-8910-rsp-48-2-0314.pdf>
13. Silva OC, Souza FF, Teixeira AC, Mente ED, Sankarankutty AK. Transplante de fígado em nosso meio: a evolução de um procedimento estratégico institucional. *Medicina Ribeirão Preto*. 2009;42(4):482-4. <http://dx.doi.org/10.11606/issn.2176-7262.v42i4p482-484>
14. Bispo EPF, Tavares CHF, Tomaz JMT. Interdisciplinaridade no ensino em saúde: o olhar do preceptor na Saúde da Família. *Interface* [Internet]. 2014 Jun [citado em 10 abr. 2018];18(49):337-50. Disponível em: <http://dx.doi.org/10.1590/1807-57622013.0158>
15. Alvarenga JPA, Meira AB, Fontes WD, Xavier MMFB, Trajano FMP, Chaves Neto G, et al. Multiprofessional and interdisciplinary in health education: experiences of undergraduates on regional interdisciplinary internship. *J Nurs UFPE*. 2013;7(10):5944-51. <https://doi.org/10.5205/1981-8963-v7i10a12221p5944-5951-2013>
16. Lima LF, Martins BCC, Oliveira FRP, Cavalcante RMA, Magalhães VP, Firmino PYM, et al. Orientação farmacêutica na alta hospitalar de pacientes transplantados: estratégia para a segurança do paciente. *Einstein* [Internet]. 2016 [citado em 10 abr. 2018];14(3):359-65. Disponível em: <http://dx.doi.org/10.1590/S1679-45082016A03481>
17. Negreiros FDS, Marinho AMCP, Garcia JHP, Morais APP, Aguiar MIF, Carvalho SL. Captação do fígado do doador para o transplante: uma proposta de protocolo para o enfermeiro. *Esc Anna Nery*. 2016;20(1):38-47. <http://dx.doi.org/10.5935/1414-8145.20160006>
18. Brasil. Ministério da Saúde. Portaria n. 356, de 10 de março de 2014. Publica a proposta de Projeto de Resolução "Boas Práticas em procedimentos para organização e funcionamento dos serviços de transplante de órgãos" [Internet]. Brasília: Ministério da Saúde; 19 out 2014 [citado em 10 abr. 2018]. Disponível em: http://bvsmis.saude.gov.br/bvs/saudelegis/gm/2014/prt0356_10_03_2014.html
19. Brasil. Ministério da Saúde. Portaria nº 2.600, de 21 de outubro de 2009. Aprova o Regulamento Técnico do Sistema Nacional de Transplantes [Internet]. Brasília: Ministério da Saúde; 21 out 2009 [citado em 10 abr. 2018]. Disponível em: http://www.ans.gov.br/images/stories/Legislacao/camara_tecnica/2013_gt_revisao_rol/20130520-doc12_contribconsnacdeseaderegulamentotecnicoedosnt.pdf
20. Magalhães ALP. Gerenciando o cuidado de enfermagem no processo de doação e transplantes de órgãos e tecidos na perspectiva do pensamento Lean [doutorado]. Florianópolis: Universidade Federal de Santa Catarina; 2015.
21. Conselho Regional de Enfermagem de São Paulo. Guia para a construção de protocolos assistenciais de enfermagem [Internet]. 2014 [citado em 10 nov. 2016]. Disponível em: <http://portal.corensp.gov.br/sites/default/files/guia%20constru%C3%A7%C3%A3o%20protocolos%2025.02.14.pdf>
22. Arcanjo RA, Oliveira LC, Silva DD. Reflexões sobre a comissão intra-hospitalar de doação de órgãos e tecidos para transplantes. *Rev Bioética*. 2013;21(1):119-25. <http://dx.doi.org/10.1590/S1983-80422013000100014>