

Communication of the surgical center team with family members and caregivers of patients*Comunicación del equipo del centro quirúrgico con familiares y cuidadores de pacientes**Comunicação da equipe do centro cirúrgico com os familiares e acompanhantes de pacientes***Abstract**

The aim was to identify scientific evidence on communication between the surgical center staff and the patients' families and caregivers. This is an integrative literature review carried out on electronic platforms and databases Virtual Health Library, Latin American and Caribbean Literature on Health Sciences, Scientific Electronic Library Online, Cumulative Index to Nursing and Allied Health Literature, Web of Science, Scopus and Embase. Five articles were analyzed. Studies carried out in Israel and the United States, between 2011 and 2017. Communication with family members took place through personal contact, phone calls, videos, messages, rounds for family members. Contents included surgery progress, patient condition, surgery data. Professionals involved in communication included surgeons, circulating nurses and liaison nurses. The pre- and postoperative periods were the moments of greatest contact by the surgical team. The use of technology for communication encompassed computer terminals, videos, pagers, and telephones, in addition to personal contact and rounds with family members. Communication constitutes an important component for Surgical Safety and must be improved among health professionals, whether members of the surgical team, but also with the patients' families.

Descriptors: Communication; Family; Monitoring, Ambulatory; Surgery Department, Hospital; Patient-Centered Care.

Resumén

El objetivo fue identificar evidencia científica sobre la comunicación entre el personal del centro quirúrgico y los familiares y cuidadores de los pacientes. Se trata de una revisión bibliográfica integradora realizada en plataformas electrónicas y bases de datos Biblioteca Virtual en Salud, Literatura Latinoamericana y del Caribe en Ciencias de la Salud, Biblioteca Electrónica Científica en Línea, Índice Acumulativo de Literatura en Enfermería y Afines en Salud, Web of Science, Scopus y Embase. Se analizaron cinco artículos. Estudios realizados en Israel y Estados Unidos, entre 2011 y 2017. La comunicación con familiares se realizó a través de contacto personal, llamadas telefónicas, videos, mensajes, rondas para familiares. Los contenidos incluyeron el progreso de la cirugía, el estado del paciente, los datos de la cirugía. Los profesionales involucrados en la comunicación incluyeron cirujanos, enfermeras circulantes y enfermeras de enlace. Los periodos pre y posoperatorio fueron los momentos de mayor contacto por parte del equipo quirúrgico. El uso de tecnología para la comunicación abarcó terminales de computadora, videos, buscapersonas y teléfonos, además del contacto personal y rondas con familiares. La comunicación constituye un componente importante para la Seguridad Quirúrgica y debe mejorarse entre los profesionales de la salud, sean o no miembros del equipo quirúrgico, pero también con las familias de los pacientes.

Descriptorios: Comunicación; Familia; Monitoreo Ambulatorio; Servicio de Cirugía en Hospital; Atención Dirigida al Paciente.

Resumo

Objetivou-se identificar evidências científicas sobre a comunicação entre a equipe do centro cirúrgico e familiares e acompanhantes dos pacientes. Trata-se de uma revisão integrativa de literatura realizada nas plataformas e bases eletrônicas Biblioteca Virtual em Saúde, Literatura Latino-Americana e do Caribe em Ciências da Saúde, *Scientific Electronic Library Online*, *Cumulative Index to Nursing and Allied Health Literature*, *Web of Science*, *Scopus* e *Embase*. Cinco artigos foram analisados. Estudos realizados em Israel e Estados Unidos, entre os anos de 2011 e 2017. A comunicação com os familiares ocorreu por contato pessoal, telefonemas, vídeos, mensagens, rounds para familiares. Os conteúdos incluíram o andamento da cirurgia, condição do paciente, dados sobre a cirurgia. Os profissionais envolvidos na comunicação incluíram cirurgiões, enfermeiros circulantes e enfermeiros de ligação. Os períodos pré e pós-operatório foram os momentos de maior contato da equipe cirúrgica. O uso da tecnologia para comunicação abrangeu terminais de computador, vídeos, pagers e telefones além do contato pessoal e os rounds com os familiares. A comunicação constitui importante componente para a Segurança Cirúrgica devendo ser aprimorada entre os profissionais da saúde, integrantes ou não da equipe cirúrgica, mas também com os familiares dos pacientes.

Descritores: Comunicação; Família; Monitorização Ambulatorial; Centro Cirúrgico Hospitalar; Assistência Centrada no Paciente.

Jessica Cristine Silva Albino¹

ORCID: 0000-0002-8919-3683

Stephanny Morais Silva¹

ORCID: 0000-0001-9443-3496

Maria Virginia Godoy da Silva¹

ORCID: 0000-0003-3980-042X

Leandro Andrade da Silva¹

ORCID: 0000-0003-3213-5527

Eliel de Oliveira Larrubia¹

ORCID: 0000-0002-3017-4701

Roni Robson da Silva¹

ORCID: 0000-0001-6010-6438

¹Universidade Veiga de Almeida.
Rio de Janeiro, Brazil.

How to cite this article:

Balbino JCS, Silva SM, Silva MVG, Silva LA, Larrubia EO, Silva RR.

Communication of the surgical center team with family members and caregivers of patients. *Glob Acad Nurs.* 2021;2(Sup.2):e174. <https://dx.doi.org/10.5935/2675-5602.20200174>

Corresponding author:

Maria Virginia Godoy da Silva

E-mail: godoydasilva@terra.com.br

Chief Editor: Caroliny dos Santos
Guimarães da Fonseca
Executive Editor: Kátia dos Santos
Armada de Oliveira

Submission: 04-22-2021**Approval:** 05-17-2021

Introduction

The operating room is defined as an extremely important sector in a hospital unit. It is aimed at low, medium, and high complexity surgical actions, where the focus of care is the patient and the teams working in the operating room are responsible for their care, throughout the perioperative period^{1,2}. All stages of surgical treatment are extremely important. In the preoperative stage, the patients' feelings surface, leaving them more fragile, which causes emotional instability. At this moment, the professional nurse has a significant role, which is to provide information to the patient, to know him and to guide him about the procedure, so that, by providing this information, he transmits security, thus reducing his fears and insecurities³.

The humanization services provided in the operating room are not aimed only at the patient, but extend to their family members, who play an important role in their recovery^{4,5}. The nursing team, due to its interaction, has as its primary characteristic the contact with the patient, being able to calm, inform, guide, comfort and reassure family members and caregivers who wait in the waiting room⁵. Developing a good relationship between the health team, family members and caregivers is beneficial, as involving the family in care improves the interaction between family members and the health team and contributes to qualifying nursing care⁶. Family members and caregivers awaiting the end of surgery in the waiting room are involved in various sensations such as fear, anguish, anxiety. In addition to these abstract feelings, there are also external ones, which are

tremors, restlessness, onychophagia, crying, rubbing hands, shaking feet and chills due to lack of information and insecurity⁵.

The nurse is primarily responsible for bringing communication to the patient and family. This professional is responsible for transmitting information that is restricted and private to the patient, where their families and caregivers wait for news of the clinical condition, surgery time and its end⁷. Thus, the need for communication between the Surgical Center team and family members and caregivers of patients during surgery is justified. Therefore, the objective was to identify how the communication process between the surgical center staff and the patients' relatives and caregivers takes place.

Methodology

It is an integrative literature review (RIL), which enables the synthesis and analysis of scientific knowledge already produced on the investigated topic⁸. To search for knowledge produced on the topic, the following research question was formulated: How does the surgical center team communicate with family members and caregivers? The RIL is a type of qualitative review, and the Joanna Briggs Institute has adapted the mnemonic PICO (Patient, Intervention, Comparison and Outcome) for the Participant, Interest and Context (PICo)⁹ elements. In this study, the elements were P - Relatives and companions; I - Communication; Co - operating room. Chart 1 shows the mapping of search terms in databases.

Chart 1. Mapping of search terms in databases. Rio de Janeiro, RJ, Brazil, 2020

PICo	Mapping
Participant	Cuidadores OR Cuidador OR familiar OR familiares OR Acompanhante*
	Caregivers OR companion OR "Care Giver" OR "Care Givers" OR Caregiver OR Carer OR Carers OR Family
Interest	Comunicação OR Comunicación OR Comunicações OR Comunicativa OR Comunicaciones
	Communication OR Communications
Context	"Centro Cirúrgico Hospitalar" OR "Servicio de Cirurgia en Hospital" OR "centros Cirúrgicos" OR "Centros Cirúrgicos" OR "Centro Cirúrgico" OR "Centro de Cirurgia" OR "Centro de Cirurgias Quirófano" OR "Centros de Cirurgia" OR "Centros de Cirurgias" OR "Procedimentos Cirúrgicos Operatórios" OR "Procedimentos Cirúrgicos Operativos" OR "Intervenção Cirúrgica" OR "Intervenções Cirúrgicas" OR "Operação Cirúrgica" OR "Operações Cirúrgicas" OR "Procedimento Cirúrgico" OR "Procedimento Cirúrgico Operatório" OR "Procedimentos Cirúrgicos" OR "Período Perioperatório" OR Perioperatório OR "Período Intraoperatório" OR "Periodo Intraoperatório" OR "Período Pós-Operatório" OR "Período Pós operatório" OR "Período Pré-Operatório" OR "Periodo Preoperatorio" OR Pré-operatório OR Intraoperatório OR Perioperatório OR "paciente cirúrgico" OR "pacientes cirurgicos" OR "pacientes cirúrgicos"
	"Surgery Department, Hospital" OR "Departments, Hospital Surgery" OR "Hospital Surgery Departments" OR "Hospital Surgery Department" OR "Department, Hospital Surgery" OR "Surgery Departments, Hospital" OR "Surgical Service, Hospital" OR Surgicenters OR Surgicenter OR "Operating Room" OR "Operating Room" OR "Room, Operating" OR "Rooms, Operating" OR "Surgical Procedures, Operative" OR "Perioperative Period" OR "Period Perioperative" OR "Periods Perioperative" OR "Perioperative Periods" OR "Intraoperative Period" OR "Intraoperative Periods" OR "Period Intraoperative" OR "Periods Intraoperative" OR "Postoperative Period" OR "Period Postoperative" OR "Periods"

From the elements, the standardized terms and synonyms were identified, in English, Portuguese and Spanish, in the Descriptors in Health Sciences (DeCS), Medical Subject Heading (MESH). Searches were performed

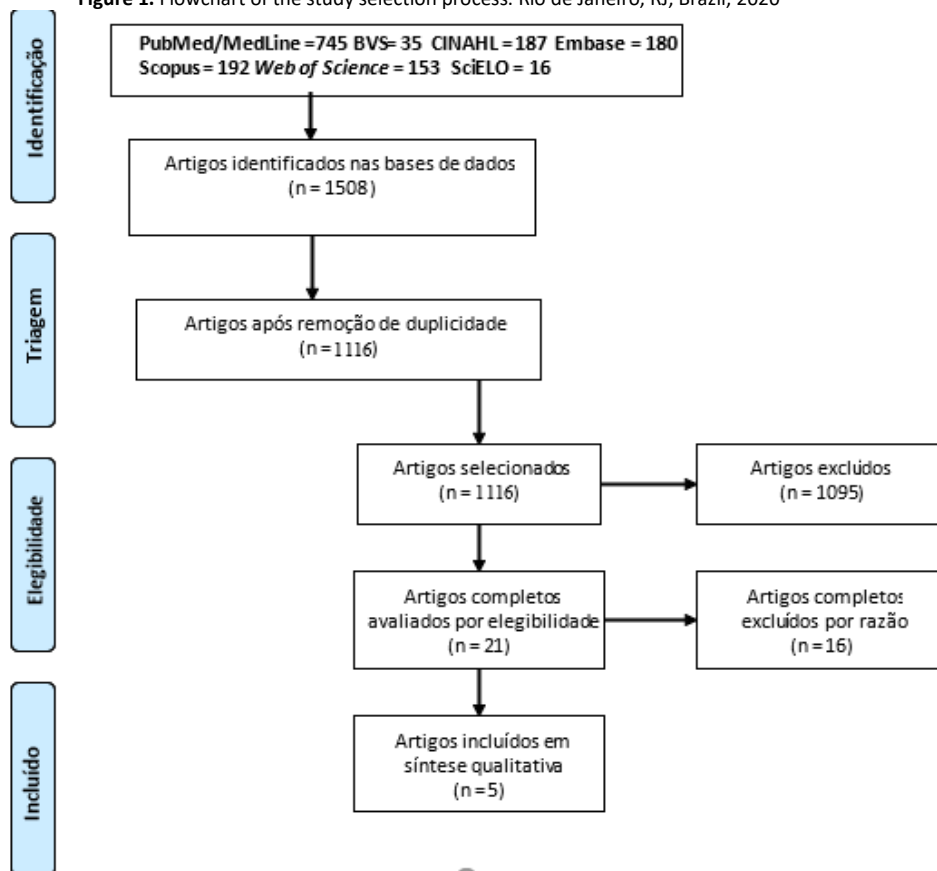
in the PubMed, BVS, CINAHAL, Embase, Scopus, Web of Science and SciELO databases and databases from February to March 2021. The inclusion criteria for articles for analysis were articles published between 2011 and 2021, available in



full, in Portuguese, English and Spanish, which dealt with the topic of communication between the surgical center staff and the patients' families and caregivers. Opinion articles,

editorials, duplicate articles, and publications that did not address the theme were excluded.

Figure 1. Flowchart of the study selection process. Rio de Janeiro, RJ, Brazil, 2020



The study followed the steps of the PRISMA¹⁰ method. Figure 1 shows the Flow of selection of primary studies included in the integrative review according to the databases and data platform PubMed, BVS, CINAHL, Embase, Scopus, Web of Science and SciELO, 2021.

Results

The documents selected for synthesis were published in international journals (n=5). The distribution of

studies by years was 2011 (n=1), 2013 (n=1), 2014 (n=1), 2016 (n=1), 2017 (n=1). In the distribution by countries, the United States predominates. There was no frequency of authors in the selected studies.

Chart 2 presents the characterization of selected publications by year of publication, title, databases, country of origin, journal, and type of study. Chart 3 presents the results of the studies selected for analysis.

Chart 2. Characterization of selected publications. Rio de Janeiro, RJ, Brazil, 2020

Year	Title	Countries	Journal/Type of Study
2011	Nurse liaison: the bridge between the perioperative department and patient companions	Israel	AORN Journal Descriptive study
2013	The Impact of the Use of Paddle Pagers on Family Member Anxiety During the Intraoperative Period	United States	Journal of PeriAnesthesia Nursing Quasi-experimental method
2014	Surgeon-Family Perioperative Communication: Surgeons' Self-Reported Approaches to the "Surgeon-Family Relationship"	United States	Journal of the American College of Surgeons Field research



2016	Improving communication with families of patients undergoing pediatric cardiac surgery	United States	Progress in Pediatric Cardiology Mixed method study
2017	Utilizing technology to improve intraoperative family communication	United States	The American Journal of Surgery Descriptive study

Chart 3. Results of studies selected for analysis. Rio de Janeiro, RJ, Brazil, 2021

Year	Authors	Objective
2011	Yulia Lerman; Itzik Kara; Nurit Porat	To present the work of the liaison nurse in a Perioperative Department and results on patient companion satisfaction. Waiting Room: computer terminals inform the patient's stage of care: entry into the OR, beginning of anesthesia, beginning of surgery, departure from the OR, admission to the PACU, authorization for family members to enter the PACU, patient discharge).
2013	Michael Tagadaya, Rosana Macapobre, Ellen R. Rich.	Identify the effect of using pagers as a method of intraoperative communication with family members in reducing their anxiety. Two communication modalities: surgery progress and need to attend the SC to contact the medical staff and nurse. The results of the study confirm the effectiveness of the pager in reducing family members' anxiety. Study with 120 family members.
2014	Aubrey L Jordan, Marko Rojnica, Mark Siegler, Peter Angelos, Alexander Langerman,	Assess the opinion of surgeons about communication between surgeons and family members. Data collection through semi-structured interviews. 13 surgeons. Communication mainly in the preoperative period with family members. Content: factual data and some with supporting content. Process in person or by phone call. Help from circulating nurses to contact the family. Before surgery and after surgery, routine contact periods. In the intraoperative period for emergency decisions or definitions in exploratory procedures. Other contents: how is the patient, how the surgery took place, what was found in the surgery, expectation of the patient's recovery.
2016	Christina Lopez, Cherissa C Hanson, Diane Yorke, Julie K Johnson, Michael R Mill, Karla J Brown, Paul Barach	Study the communication between professionals and family members of children undergoing cardiac surgery. 10 family members and 13 professionals. Hospital 140 beds. Communication processes: personal contact, family visits to the CTI and through video. Video content: Pediatric Cardiac ICU environment. In the CTI environment: rounds aimed at family members. Participants; Intensivists, surgeons and nurses. Content: evolution of the child, trajectory of the expected surgery, definition of who will remain with the child in the postoperative period. Intraoperative period assessed by family members as very stressful due to the surgery and lack of communication.
2017	Minna M. Wieck, MD, Blue Blake, Chanda Sellick, Daniel Kenron, Daniel DeVries, Susan Terry, Sanjay Krishnaswami	Study the possibility of using existing technology to leverage communication with family members. Pediatric Surgical Center. Communication with pager. Circulating Nurse Participation sends standard messages. Pager text limited to 80 characters. Confidential. Reliable technology. Frequent communication.

Discussion

Among the selected studies, three were carried out in hospital operating rooms^{13,14,15} and another two in outpatient surgical centers^{11,12}. The use of information technologies was observed in the selected studies using pagers^{12,15}, videos^{11,14}, phone calls¹³. The communication process with family members was also evidenced through direct contact^{13,14} and rounds for family members¹⁴.

In the rounds, carried out with family members of children undergoing pediatric surgery, the contents covered

the child's evolution, trajectory of the expected surgery, definition of who will remain with the patient in the postoperative period¹⁴. The content of information in other studies included the progress of surgeries¹², expected trajectory for surgery¹⁴; what was found in the surgical procedure¹³, patient condition¹³. Details of the transoperative period were also presented, from separation from the family in the admission area to departure from the OR and transfer to the PACU¹¹.



The content of the information per pager consisted of standard messages: "Everything is going well". "Start of surgery". "Surgery going well". "Surgery Finishing". "Come to the reception of the Surgical Center (CC)". Pager text was limited to 80 characters.

This technology was evaluated as confidential, reliable, allowing frequent communication, favoring displacements, and reducing crowding in the CC reception¹⁵. In a study carried out in Israel, computer terminals inform the patient's stage of care: entry into the OR, beginning of anesthesia, beginning of surgery, exit from the OR, admission to the PACU, authorization for family members to enter the PACU, patient discharge¹¹.

In the same study, three communication strategies were identified with family members of surgical patients: computer terminal, video and pager¹¹.

The exchange of information between SC professionals and family members took place mainly through two communication modalities: surgery progress and need to attend the SC to contact the medical staff and nurses¹².

The professionals responsible for communicating with family members were: surgeons^{12,13}, circulating nurses¹⁵ and liaison nurses¹¹. The professional nurse liaison has the responsibility to provide information during the performance of surgeries every hour and advises on the progress of the surgery. In addition, it collects information directly from each room¹⁶ and reports it to the family and companions¹¹.

The surgeons, in the selected studies, were responsible for information on the diagnosis, prognosis, and details of the surgery¹¹. The pre- and postoperative periods were the moments of greatest contact between the team and the patients' families¹⁷; however, the intraoperative period was one of greater silence and stress due to the lack of communication^{13,14}.

In the intraoperative period, communication with family members occurred for emergency decisions or definitions in exploratory procedures¹³.

Conclusion

Studies published between 2011 and 2017 presented in this review reveal that communication with family members of surgical patients occurs through personal contact, phone calls, videos, pager messages, rounds for family members. The contents included the progress of the surgery, the patient's condition, what was found in the surgery, the trajectory of the expected surgery. The pre- and postoperative periods were the moments of greatest contact between the team and the patients' families.

The intraoperative period was one of greater silence and stress due to lack of communication. At this stage, communication with family members took place for emergency decisions or definitions in exploratory procedures. Professionals involved in communicating with family members included surgeons, circulating nurses and liaison nurses. This liaison function appears as another possibility for operating room nurses, collecting information directly from each operating room, reporting it to the family and caregivers.

The limitation of the study involves the fact that the studies reveal realities in other countries. Publications referring to the theme and research question in the Brazilian reality were not found. As a contribution, it is highlighted that communication constitutes an important component for Surgical Safety and must be improved not only between health professionals, whether members of the surgical team, but also with the patients' families. These are important for the success of surgical treatment as well as for reducing patients' anxiety.

References

1. Christóforo BEB, Zagonel IPS, Carvalho DS. Relacionamento Enfermeiro-Paciente no pré-operatório: uma reflexão luz da teoria de Joyce Travelbee. *Cogitare Enferm* [Internet]. 2006 [acesso em 3 mai 2020];11(1). Disponível em: <https://revistas.ufpr.br/cogitare/article/view/5977>
2. Salbego C, Dornelles CS, Greco PBT, Pradebon VM, Alberti GF. Significado do cuidado para a enfermagem de centro cirúrgico. *Rev. Rene* 2015;16(1). DOI: 10.15253/2175-6783.2015000100007
3. Rocha RG, Carvalho VF, Santos MS, Tavares JMAB, Silva GC, Marta CB. O impacto do cuidado de enfermeiros na redução da ansiedade em pacientes cirúrgicos. *Rev Saúde Coletiva de Barueri* [Internet]. 2019 [acesso em 3 mai 2020]. Disponível em: <http://revistas.mpmcomunicacao.com.br/index.php/saudecoletiva/article/view/132/118>
4. Oliveira JNJ, Moraes CS, Marques NS. Humanização no centro cirúrgico: a percepção do técnico de enfermagem. *Rev SOBCEC* [Internet]. 2012 [acesso em 3 mai 2020];17(3). Disponível em: <http://www.sobecc.org.br/arquivos/artigos/2012/Arquivos/artigos/4.pdf>
5. Salimena AMO, Andrade MP, Melo MCSC. Familiares na sala de espera do centro cirúrgico: sentimentos e percepções. *Cienc. Cuid. Saúde* [Internet]. 2012 [acesso em 14 dez 2020];10(4). Disponível em: <http://periodicos.uem.br/ojs/index.php/CiencCuidSaude/article/view/18322>
6. Guerreiro MPP, Siqueira FD, Dezordi CCM, Kirchner RM, Dalmolin GDL, Stumm EMF. Estresse percebido em familiares de pacientes em sala de espera de um centro cirúrgico. *Rev. Enferm Foco*. [Internet]. 2019 [acesso em 23 mai 2020];10(4). Disponível em: <http://biblioteca.cofen.gov.br/wpcontent/uploads/2020/05/estressefamiliaressaladaespera.pdf>
7. Bastos JLD, Duquia RP. Um dos delineamentos mais empregados em epidemiologia: estudo transversal. *Scientia Medica* [Internet]. 2007 [acesso em 1 jun 2020]; 17(4). Disponível em: <http://www.univates.br/revistas/index.php/destaques/article/view/1329>



8. Mendes KDS, Silveira RCCP, Galvão CM. Revisão integrativa: método de pesquisa para a incorporação de evidências na saúde e na enfermagem. Texto e context enferm. [Internet]. 2008 [acesso em 28 abr 2019];17(4). Disponível em: <http://www.scielo.br/pdf/tce/v17n4/18.pdf>
9. Joanna Briggs Institute (AU). Joanna Briggs Institute Reviewer's Manual 2014. The systematic Review of Economic Evaluation Evidence. University of Adelaide [Internet]. South Austrália 2014 [acesso em 28 abr 2019]. Disponível em: <http://joannabriggs.org/assets/docs/sumari/ReviewersManual-2014.pdf>
10. Galvão TF, Pansani TSA, Harrad D. Principais itens para relatar revisões sistemáticas e meta-análises: a recomendação PRISMA. Epidemiol. Serv. Saúde. 2015;24(2). DOI: 10.5123/S1679-49742015000200017
11. Lerman Y, Kara I, Porat N. Nurse liaison: the bridge between the perioperative department and patient companions. AORN J. 2011;94(4):385-92. DOI: 10.1016/j.aorn.2011.01.019
12. Tagadaya M, Macapobre R, Rich ER. The impact of the use of paddle pagers on family member anxiety during the intraoperative period. J Perianesth Nurs. 2013;28(6). DOI: 10.1016/j.jopan.2012.10.009
13. Jordan AL, Rojnica M, Siegler M, Angelos P, Langerman A. Surgeon-family perioperative communication: surgeons' self-reported approaches to the "surgeon-family relationship". J Am Coll Surg. 2014; 219(5). DOI: 10.1016/j.jamcollsurg.2014.05.019
14. Lopez C, Hanson C, Yorke D, Johnson J, Mill M, Brown K et al. Improving communication with families of patients undergoing pediatric cardiac surgery Prog Pediatr Cardiol. 2016. DOI: 10.1016/j.ppedcard.2016.11.001
15. Wieck MM, Blake B, Sellick C, Kenron D, DeVries D, Terry S, et al. Utilizing technology to improve intraoperative family communication. Am J Surg. 2017;213(5). DOI: 10.1016/j.amjsurg.2017.03.014
16. Robson SR, Preissler NM, Andrade SL, Godoy SMV, Leite HR, Bertolossi MC. Consumo de drogas psicoativas em contexto sexual entre homens gays como fator de risco para transmissão de HIV/Aids. Glob Acad Nurs. 2020;1(3):e57. DOI: 10.5935/2675-5602.20200057
17. Robson SR, Costa LC, Silva AM, Andrade SL, Godoy SMV, Serpa FA, et al. Contribuições da Monitoria em Fundamentos de Enfermagem II na Formação Acadêmica de Estudantes de Enfermagem: Relato de Experiência. Glob Acad Nurs. 2021;2(1):e79. DOI: 10.5935/2675-5602.20200079

