

ORIGINAL RESEARCH

Use of group discussion as an educational strategy during nursing appointments for patient undergoing bariatric surgery

Lívia Moreira Barros¹, Maria Girlane Sousa Albuquerque Brandão^{*1}, Amanda de Oliveira Barbosa¹, Ludmila Alves do Nascimento², Lorena Barbosa Ximenes², Joselany Áfio Caetano²

¹State University Vale do Acaraú, Sobral, Ceará, Brazil

²Federal University of Ceará, Fortaleza, Ceará, Brazil

Received: March 26, 2018

Accepted: July 10, 2018

Online Published: July 26, 2018

DOI: 10.5430/jnep.v8n12p36

URL: <https://doi.org/10.5430/jnep.v8n12p36>

ABSTRACT

Objective: The purpose of this study was to describe a health education meeting based on group discussion during a nursing appointment with patients who are waiting to perform bariatric surgery.

Methods: This is an exploratory study with a qualitative approach performed in July 2017 at a referral hospital in the State of Ceará-Brazil in the performance of bariatric surgeries. Twelve subjects participated and the data collection took place through self-completion of a semi-structured interview. Data analysis was performed according to the content analysis proposed by Bardin (2009).

Results: It was observed that the participants considered that the group discussion allows interaction among the group and favors the construction of common knowledge.

Conclusions: It was concluded that group discussion is a favorable methodology to be used during health education in nursing appointments, because it allows the sharing of doubts and experiences among the participants.

Key Words: Bariatric surgery, Morbid obesity, Health education, Nursing

1. INTRODUCTION

Currently, bariatric surgery is the best treatment option for morbid obesity, complementing the practice of other therapies for weight control and of comorbidities associated with adiposity excess. In addition to providing long-term sustainable weight loss, bariatric surgery also improves the individual's metabolism by resolving various diseases (hypertension, diabetes mellitus, dyslipidemia), as well as improving biopsychosocial well-being and quality of life.^[1,2]

Preparation for surgery emphasizes patient education in which healthcare professional should help him/her to un-

derstand the behavioral changes necessary after surgery, as well as to clarify doubts about the surgical procedure.^[3]

It is necessary for the individual to be aware of the processes to which he/she will be submitted and one's role as an active agent in the treatment, being the adherence fundamental to achieve good results, because, despite the benefits of bariatric surgery, there are risks, complications and changes associated to the procedure.^[4]

Thus, the preoperative period may represent the starting point for the individual's sensitization to behavioral changes re-

*Correspondence: Maria Girlane Sousa Albuquerque Brandão; Email: girlane.albuquerque@yahoo.com.br; Address: Street L 04, 428, Jerônimo de Medeiros Prado, Sobral, Ceará, Brazil.

lated to lifestyle and evaluations of these interventions in the postoperative patients' health should be made periodically.^[5] In recent years, nurses' work has been widely diversified and expanded, becoming a complex process that includes caring, educating and managing. Health education permeates nurses' daily lives, considering the recovery and maintenance of health, prevention of diseases and patient's teaching needs. This reality includes hospital environment, where nurses are called to rethink their practice of direct care, for a more comprehensive model, in which education is part of care.^[6]

Health education is understood as an oriented process and planned for the use of strategies that stimulate the autonomy of the subjects, presupposing shared and non-directive actions, enabling free decision making and selection of alternatives in an adequate context of information, cognitive skills and support. The communication process established in the educational action of the nurse has the purpose of contributing to improve nursing practice by creating learning opportunities.^[7]

It is known that bariatric surgery represents the search for an improvement in the quality of life and health condition. Patients, by opting for this treatment, become hopeful for the opportunity to start a new life and change their behavioral habits to favor weight loss and achieve a healthier life. However, in order to be aware of the importance of adherence to the guidelines of the multiprofessional team and also to healthy habits, it is necessary for nurses to increase popular participation in the care directed to these patients in order to assist them in the search for a healthier life.

So, during nursing advise, the nurse can use educational strategies that favor the empowerment of patients about bariatric surgery and perioperative care, so that they reflect on the attitudes necessary to achieve a better quality of life after the procedure, being, thus, an action of education and health promotion.

It is justified the choice of the group discussion for this moment of health education, considering that group education, when performed through the dialogical process and qualified listening with appreciation of the participants with their knowledge, beliefs and values, is considered effective in health promotion, strengthening autonomy and adherence to self-care practices.

It is understood that the group discussion can contribute to the teaching-learning process of people living in chronic health situations such as obesity,^[8] favoring an interactive space that allows the sharing of feelings and well-being as a discussion among members about their health problems and possible solutions to improve self-care and reorientation of health practices.^[9]

Thus, this study is justified by the need for nursing to improve care assistance to patients with morbid obesity who opt for bariatric surgery as a treatment, considering that obesity is currently a public health problem and that the number of bariatric surgeries tends to grow gradually over the next few years, a fact that alerts us to the development of studies that contemplate the peculiarities of nursing care to a patient undergoing bariatric surgery.

Considering the above, this study aimed to describe a health education meeting based on group discussion during a nursing appointment with patients who are waiting to perform bariatric surgery.

2. METHODS

2.1 Design study

An descriptive study, with a qualitative approach, developed in July 2017 at a reference hospital in the state of Ceará, Brazil, in bariatric surgery performed by the Unified Health System (SUS), which is a highly complex care unit for patients with morbid obesity.

2.2 Inclusion and exclusion criteria

Weekly, a nursing appointment is carried out at this institution with preoperative patients with the purpose of informing the routine of the hospitalization and hospital discharge process, guiding about perioperative care and clarifying doubts.

Twelve individuals participated as inclusion criteria, who had already had all the appointments with a multiprofessional team and the requested exams and were waiting for the call to have the surgery performed. As exclusion criterion: patients who had some cognitive limitation in order to compromise participation in the proposed educational activity.

2.3 Data collection

Data collection took place through the self - completion of a semi - structured instrument divided into two parts: epidemiological characterization and evaluation of health education and recording of speeches during educational strategy based on group discussion.

The operationalization of the educational strategy was held in a single session and there was the participation of a moderator. Lasted about 90 minutes and was divided into four moments (see Table 1).

The educational strategy was held in the institution under study, which has easy access for participants and has adequate structure (air-conditioned environment and chairs for obese people). On the day for the group discussion on perioperative care, the researcher initiated the meeting, clarified the objectives and activities that would be performed that day.

Table 1. Distribution of the moments of the group discussion meeting and objectives

Moments	Objective
Moment 1	To start the meeting, each participant was asked to say his/her name and how long he/she has been participating in the obesity program, which allowed interaction and knowledge of the members among the group, working as “ice breaker” dynamics or presentation.
Moment 2	Distribution of the chapters of the booklet in pairs and delivery of cards and pens to assist in the presentation.
Moment 3	After group reading of each chosen chapter, a circle was formed and each pair presented their theme to the other participants. At the end of all presentations, there was a group discussion of each theme and the explanation of the doubts.
Moment 4	After clarifying the doubts, subjects were able to share the experience of the group discussion and, later, the moderator thanked everyone for their participation and requested the completion of the data collection instrument, and the educational strategy was finalized.

In order to favor the moment of learning, we have chosen as an instructional method the group discussion that can be defined as a teaching method in which learners come together to exchange information, feelings and opinions among themselves and with the teachers. It is an instructional technique commonly used, focused on the learner as well as on the subject.^[10] The educational booklet “Bariatric Surgery: Care for a Healthy Life”, which addresses information about bariatric surgery, was used as instructional material; there was follow-up with the multiprofessional team and preoperative preparation; hospital admission; hospital postoperative; home postoperative and healthy habits in the late postoperative period, besides presenting frequent doubts and recipes for the phases of the diet.^[11]

The booklet was given to all the participants of the meeting for individual reading and, after the reading was finished, a group discussion began.

2.4 Data analysis

The audio of the meetings was recorded, and the participants’ speeches were transcribed. There was also the transcription of data from each question of the guides, fully copying up the contents of all the lines. After this step, the speeches in common and highlighted phrases were identified in which the data were interpreted according to the content analysis proposed by Bardin.^[12]

The content analysis proposed by Bardin^[12] consists of three stages: pre-analysis (selection of documents for analysis, taken from hypotheses and objectives of the study and development of indicators that help the final interpretation); Exploration of the material (raw data are aggregated into units and starts exhaustive reading of the transcripts and observations for comparison for the purpose of research, to then perform the clipping of the recorded speeches) and treatment of results and interpretation (categories they are established according to the analysis obtained by exploiting the mate-

rial).

Therefore, the analysis of the material identified the following categories: “Satisfaction in participating in health education”; “The importance of group discussion”; “The benefits of exchanging experiences”; “The use of the educational book as support material in the appointment” and “Increasing knowledge with health education”.

2.5 Ethical considerations

The project was approved by the Research Ethics Committee of Federal University of Ceará, through CAAE 22473713.2.3001.5041, and prior to data collection, it was requested that patients sign the Free and Informed Consent Term. In order to preserve anonymity, the subjects of the study were identified with fictitious names of warriors due to their constant struggle against obesity.

3. RESULTS

Ten women and two men participated in the study, being mean age 41.3 years with a variance between 30 and 55 years. Nine participants were catholic and two were protestant. As for marital status, six were single, four were married and two were divorced. As far as schooling was concerned, ten had finished high school and two had higher education. As to the origin, nine were from Fortaleza and three lived in the countryside of Ceará.

Categories found were: “Satisfaction in participating in health education”; “The importance of group discussion”; “The benefits of exchanging experiences”; “The use of an educational book as support material in the appointment” and “Increasing knowledge with health education”.

Category 1: Satisfaction in participating in health education

Based on questioning the experience of participating in an educational activity, subjects reported that the moment of collective nursing appointment was excellent, as it can be

observed in the speeches. Group health education was seen as a constructive and very productive moment in which everyone could express their doubts and share the learning about bariatric surgery, being positive for strengthening the decision to perform the procedure and to have good results (see Table 2).

Category 2: The importance of group discussion

For pair reading, the following themes were selected: follow-up with the multiprofessional team and preoperative preparation; hospital admission; hospital postoperative; home postoperative and healthy habits in the late postoperative period.

After reading, there was the moment of group discussion (see Table 3).

Being able to express their experience and their doubts during the group discussion with other participants was seen as a learning moment in which they could learn more about surgery and clarify their doubts. In addition, it was seen as a time of mutual help and increased interaction from the sharing of information on the topics. The subjects stated that the group discussion makes possible the knowledge of the doubts of each one, which are very similar in some cases.

Table 2. Central themes found in the category titled “Satisfaction in participating in health education”

Temas Themes	Relatos Reports
Satisfaction with the Group Discussion	“It was very constructive.” (Dandara)
	“It was very important and productive to achieve the goal of having good results in the surgery.” (Emilly)
	“I thought it was great to hear the explanations from my colleagues and use material to support them.” (Achilles)
	“It was very helpful. I felt like talking.” (Maya)
	“Very cool. It helped to clear some doubts.” (Eloy)
	“Very good. Some doubts I had were gone.” (Flora)
	“We shared what we've learned and our doubts.” (Bryan)
	“It was very constructive.” (Dandara)
	“It was very important and productive to achieve the goal of having good results in the surgery.” (Emilly)
	“I thought it was great to hear the explanations from my colleagues and use material to support them.” (Achilles)

Table 3. Central themes found in the category titled “The importance of group discussion”

Temas Themes	Relatos Reports
Importance of the Group Discussion	“Being together as a group helps resolve doubts.” (Dandara)
	“Learning the information and reporting on what we know to our colleagues. It was good because we learned more like that.” (Iris)
	“Acquiring more knowledge about bariatric surgery before having it performed.” (Emilly)
	“Great. You can listen to the experiences and doubts of other participants.” (Nice)
	“It was important to clarify about the surgery.” (Cibele)
	“I really enjoyed it because some of my doubts are different from the doubts of my colleagues and we have been able to learn more.” (Achilles)
	“It's good to share our experiences.” (Luana)
	“This moment is important for the clarification of doubts.” (Maya)
	“It's very good to strengthen mutual aid.” (Eloy)
	“It was great because it facilitated interaction with colleagues on the themes of the meeting.” (Flora)
	“It was very constructive.” (Dandara)
	“It was very important and productive to achieve the goal of having good results in the surgery.” (Emilly)
	“I thought it was great to hear the explanations from my colleagues and use material to support them.” (Achilles)

Category 3: The benefits of sharing experiences

Patients highlighted the benefits of the exchange of experiences from group discussion (see Table 4).

Learning more about surgery, understanding care in each

phase of the perioperative, discussing the difficulties that are being experienced, sharing the doubts and learning to listen to what the colleague speaks were the benefits of the group discussion that were highlighted by the participants.

Table 4. Central themes found in the category titled “The benefits of sharing experiences”

Temas Themes	Relatos Reports
Benefits about the Group Discussion	“It was very good for my learning.” (Isis)
	“I have increased my knowledge about various aspects of bariatric surgery, especially about care.” (Emilly)
	“It was wonderful. I was very knowledgeable about everything.” (Nice)
	“It was great because I was able to learn from my colleagues and to talk about our difficulties.” (Achilles)
	“Pretty satisfying today. I was able to share my doubts and get to know more about the surgery.” (Luana)
	“Very good. It was possible for me to have more information about bariatric surgery.” (Maya)
	“I learned to listen to what others say.” (Eloy)
	“Everyone loved it because we are in the same situation. It was good because we realized that our doubts are similar.” (Bryan)

Category 4: The use of the educational book as support material in the appointment

In health education, the educational booklet was adopted as an instructional material, which was well evaluated among the patients (see Table 5).

For the participants, the booklet is an educational material that provides information about bariatric surgery and all phases of the perioperative, being explanatory and attractive with interesting illustrations and easy to understand.

Table 5. Central themes found in the category titled “The use of the educational book as support material in the appointment”

Temas Themes	Relatos Reports
Support Material like educacional technology	“I really loved the booklet. It is very important. I wanted to have one to me.” (Dandara)
	“It’s very interesting. I managed to understand everything with it.” (Iris)
	“It’s great. Very interesting. You can learn fast.” (Emilly)
	“I loved it. It is very important to increase our knowledge and to lose our fear.” (Cibele)
	“The booklet is beautiful, well explained and illustrated.” (Achilles)
	“It’s great to help you understand both before and after surgery and the necessary care.” (Luana)
	“It’s interesting. You learn from the beginning to the end of surgery.” (Maya)
	“The booklet is really explanatory and presents all the information we need.” (Flora)

Category 5: Increasing knowledge in Group Discussion

Several doubts emerged during the group discussion, but most were related to the postoperative period (see Table 6).

It was observed that the doubts that emerged in the group discussion were related to postoperative care, such as nutritional phases, physical exercises and possible complications, besides information such as types of surgical techniques, family participation, intubation in the operation room and contraceptive use.

period and standardization of themes to be addressed.^[13,14] This educational moment is crucial to help the adaptation of patients after surgery, and should not be concentrated only on physical health, complications and diet, but rather in the psychosocial and the preparation of lifestyle modifications expected for the postoperative.^[14] Encourages knowledge sharing (including benefits, risks and challenges) and allows for greater advocacy in health for the patient.^[15,16]

In this study, it was observed that the preoperative education with group approach makes it possible to deepen the dialogue with the active participation of those involved in the process. Allows participants to express their opinions, concepts and impressions about the proposed theme, in addition to work reflexively group manifestations.^[17,18] Allows the interac-

4. DISCUSSION

Preoperative education is important to improve results after surgical intervention and there is a shortage in the literature about the planning of educational strategies developed in this

tion between the researcher and participants of the study, because it is a kind of group interview, in which there is the possibility of discussion focused on specific topics, in which

participants are encouraged to issue opinions about the topic of interest.^[19]

Table 6. Central themes found in the category titled “Increasing knowledge in group discussion”

Temas Themes	Relatos Reports
Knowledge after Group Discussion	“It was satisfying. I was able to learn more about post-operative care, especially when we can practice physical activities.” (Dandara)
	“On postoperative nutrition, physical exercises and the importance of family participation.” (Isis)
	“I learned about the types of surgery. I did not know.” (Iris)
	“I had doubts about the tubing, but I was clear.” (Emilly)
	“I wanted to know about the scars from the surgery.” (Nice)
	“I learned about what we should take to the hospital and what cares I should take when I get home.” (Cibele)
	“I did not know that I could not eat sweets and I should be very careful about food.” (Achilles)
	“If we could make efforts after the surgery.” (Luana)
	“About the post-operative and the complications that can happen.” (Maya)
“I could understand every phase of feeding.” (Eloy)	
“I did not know about the need to change the contraceptive.” (Bryan)	

Patients informed, motivated and accountable interact more effectively with health professionals and strive to perform actions that produce health outcomes,^[20] becoming more aware of the operational risks and are more quiet and more willing to adhere to the post-operative care.^[15, 16] For the Pan-American Health Organization (PAHO), the empowerment of patients is essential with the support of care goals, freedom in solving problems and participation in clinical decision-making processes along with the health team.^[21]

Nurses play a key role in the care of patients undergoing bariatric surgery both preoperatively and postoperatively. Essential educational issues include appropriate expectations for surgery and the immediate postoperative period, potential weight loss, dietary changes required by the surgical procedure, and postoperative physical activity goals.^[22] Duly oriented patients feel better prepared for the surgical procedure, experience better coping with the difficulties experienced in the postoperative period and, consequently, show greater satisfaction with the treatment result.^[23]

However, in order to adequately guide patients, it is important that nurses have scientific foundations and provide the implementation of effective strategies to promote changes in behavior, attitudes and lifestyles of patients, considering that the focus of nursing care is to promote development of patient’s abilities for their self-care, which will only be possible with the use of educational interventions by the nurse and multidisciplinary team.^[24]

In this manner, it can be seen that the nurses’ performance towards the patient and his/her family throughout the perioperative provides several opportunities for health education,

in which the definition of the types of treatment for obesity, its indications, the necessary care and the behavioral changes can be discussed together, promoting a reflection of the individual about the decision to perform bariatric surgery and the adherence to the changes that the treatment implies.

Adequate preparation of the patient in the preoperative period helps to reduce complications in short term and in compliance with postoperative care. Hence, health professionals should implement educational strategies in the preoperative period in order to identify patients who present knowledge deficits about bariatric surgery.^[25] When the learning process is successful, the patient understands the information provided in his/her care plan and implements knowledge and skills that will promote his/her recovery and satisfaction.^[26]

An interactive, partnering educational approach gives the client the opportunity to explore and expand their self-care skills, making them active during the educational process. Instead of the traditional goal of simply disclosing information, the practitioner emphasizes the patient’s ability to use their potential, ability, and resources to the community. The results of the educational process can be perceived when changes occur in knowledge, attitudes and abilities of the individual.^[10]

Proposing assertive strategies to control and change behavior, favoring information about the disease and surgical treatment, providing space for expression of feelings, doubts and fears, offering psychosocial support, promoting adherence to treatment, favoring reflection on how the patient will adapt to new lifestyle, verifying family support and how much the patient is involved and aware about the treatment and its

unfolding are aspects that are part of the education of the candidate for bariatric surgery.^[27]

In this study, group discussion was chosen as an instructional method to favor the process of effective and quality learning among the participants, who considered the moment as positive for the interaction between the subjects and favorable for the construction of knowledge together.

The active learning methodologies propose to replace the memorization and the simple transfer of information and skills, the construction of knowledge from the experience of real or simulated situations, stimulating the capacities of critical and reflexive analysis and learning.^[28] In the group discussion, the nurse educator plays a facilitating role, providing guidance and support for learning, being more effective in small groups so that learners can take an active role.^[10]

The sharing of experiences from group discussion allows each participant to have an opinion on the subject and also to share their doubts and feelings. However, for this to happen all subjects should feel safe and comfortable enough to express their points of view. A useful approach is to inform the group at the beginning of the session that the goal of the discussion is to listen to all members, who will be asked to contribute and set out their points during the session.^[10]

In addition, the participatory approach enables an emancipatory nursing practice, from the perspective of empowerment of subjects and nurses.^[6] The inclusion of the subject must be made from the problematization and reflection about their living conditions and the perception of the need to change behavior or not.^[29] By being included in the educational process, one can help the nurse to identify their knowledge needs and establish strategies according to their reality, which facilitates the absorption of information provided and, consequently, their empowerment.

Educational resources may be necessary to ensure proper preoperative preparation of candidates for bariatric surgery.^[25]

Fear of anesthesia, lack of knowledge of preoperative preparation, surgical procedure and doubts about recovery provoke anxiety that can be avoided by a clear and sincere reception and communication with the patient and his/her family.^[4] Consequently, while teaching the patient, a nurse can use both verbal and written instructions on the progression of the diet, medication regimen, surgical incision care, signs and symptoms that should be communicated to the multiprofessional team, follow-up and possible restrictions on driving and other activities.^[30]

Nursing professionals are improving the quality of care offered to users and, in order to facilitate the orientation of patients and families in the treatment, recovery and self-care

process, a favorable initiative is the use of educational materials. Having these materials facilitates and standardizes the guidelines to be absorbed, aiming health care. At the same time, it is also a way to help individuals better understand the health/disease process and to experience the recovery period.^[31,32]

With the use of the educational booklet in health education, it was verified that patients were more confident in reporting on the information learned to the other subjects of the group, besides reporting that the material helps in increasing knowledge about bariatric surgery and care in the perioperative period. Instructional materials provide the educator with tools to transmit messages creatively, clearly, accurately, and in a timely manner. They help the nurse to reinforce information, to clarify abstract concepts and to simplify complex messages. In addition, they have the potential to help learners not only to acquire knowledge and skills but also to retain more effectively what they are learning.^[10]

Providing access to information through an educational material favors more dynamic educational practice that allows learning and contributes to behavioral changes, which are necessary to obtain and maintain good results throughout the postoperative period of bariatric surgery. It is worth emphasizing that its use during educational practices favors the dialogue between the healthcare professional, the patient and the family in which there is the possibility of providing new knowledge and instigating the patient and his/her family to question the informed conduct, favoring the principle of autonomy and the empowerment of these individuals.

Inclusion of technologies in the context of health education complements the actions performed by nurses in their relationship with clients and points out alternatives for improving education and its democratization.^[24,33] Currently, available technologies can be seen as important allies in the conduct of strategies to favor patient education and post-operative follow-up.^[34]

Technology used in health and nursing care can be defined as a set of systematized (scientific and empirical) knowledge, constantly in the process of innovation, which are applied by the nursing professional in their work process to reach a specific goal. Permeated by reflection, interpretation and analysis, it is subsidized by professional and human experience.^[35] The printed educational material presents itself as a health promotion tool, enabler of educational process in health, able to make the patient a co-participant in their care, which enables the dialogic integration between nurse-client and family, making possible the construction of an easily available and low-cost multidimensional knowledge capable of empowering patients and families.^[32]

Therefore, the educational material appears as favoring the practice of health education. The nurse as an educator must appropriate these technologies in order to facilitate the patient's learning, involving him/her in the educational process, through a dialogic relationship, in which both knowledges are present with the intention of empowering him/her to promotion and health maintenance and disease prevention. Particularly noteworthy is the role of nurses in obese patients who undergo bariatric surgery in order to know their daily lives, obstacles to the adoption of a healthy lifestyle and the establishment of strategies that promote a better quality of life and compliance to guidelines.

5. CONCLUSION

Based on the results of this study, it is concluded that group discussion is a favorable methodology to be used during health education in nursing appointments, as it allows the sharing of doubts and experiences among the participants, as well as allowing them to learn together. It was observed that the main doubts were related to the moment of the post-operative period, which demonstrates the curiosity of these patients to have more knowledge about the experiences that they will have after surgery. It is worth noting that the use of the educational book made it possible to clarify doubts and to the emergence of new questions from group discussion.

In view of the above, it is inferred that it is through health education that the empowerment of the individual and his community may occur. Promoting health through educational strategies enables the emergence of empowerment process in which one begins to understand himself as being able to

control his health and intervene in the necessary changes. In nursing advise, health education reflects in a greater commitment of the patient in the conduct related to their treatment, increasing their knowledge and reach, in a shorter time, of physical and psychological well-being. In this manner, it is suggested to carry out new studies aimed at implementing educational strategies at each phase of the perioperative so that it is possible to identify a higher number of doubts in this population about the surgical treatment of obesity, which may contribute to a better adherence to postoperative care. In addition, it is necessary a greater commitment from nursing in the accomplishment of educative actions that aim at the empowerment of the population and the attainment of a better quality of life.

The results found are evidence for nursing, emphasizing the importance of health education based on group discussion during the preoperative preparation of bariatric surgery. The provision of guidelines on the surgical procedure through the booklet and the possibility of clarifying the doubts from the group discussion can encourage the increase of the empowerment of obese individuals, making them able to carry out the taking of decision for the appropriate treatment for obesity. Thus, it is recommended to undertake new studies aiming to explore the contribution of health education with individual or group approach and its effects on patient learning, and the benefits of access to information for self-care and For the management of obesity.

CONFLICTS OF INTEREST DISCLOSURE

The authors declare that there is no conflict of interest.

REFERENCES

- [1] Khwaja HA, Bonanomi G. Bariatric surgery: techniques, outcomes and complications. *Current Anaesthesia & Critical Care*. 2010; 21(1): 31-38. <https://doi.org/10.1016/j.cacc.2009.10.005>
- [2] Kissler HJ, Settmacher U. Bariatric Surgery to Treat Obesity. *Seminars in Nephrology*. 2013; 33(1): 75-89. PMID:23374896 <https://doi.org/10.1016/j.semnephro.2012.12.004>
- [3] Stevens T, et al. Your patient and weight-loss surgery. *Advances in Psychiatric Treatment*. 2012; 18(1): 418-425. <https://doi.org/10.1192/apt.bp.111.008938>
- [4] Morales CLP, et al. Perioperative communication from the perspective of patients undergoing bariatric surgery. *Texto & Contexto Enfermagem*. 2014; 23(2): 347-355, 2014.
- [5] Baillot A. Feasibility and Impacts of Supervised Exercise Training in Subjects with Obesity Awaiting Bariatric Surgery: a Pilot Study. *Obesity Surgery*. 2013; 23(7): 882-891. PMID:23430477 <https://doi.org/10.1007/s11695-013-0875-5>
- [6] Rigon AG, Neves ET. Educação em saúde e a atuação de enfermagem no contexto de unidades de internação hospitalar: o que tem sido ou há para ser dito? *Texto & Contexto Enfermagem*. 2011; 20(4): 812-817. <https://doi.org/10.1590/S0104-07072011000400022>
- [7] Salles PS, Castro RCB. Validação de material informativo a pacientes em tratamento quimioterápico e aos seus familiares. *Revista da Escola de Enfermagem da USP*. 2010; 44(1): 182-189. <https://doi.org/10.1590/S0080-62342010000100026>
- [8] Berardinelli LMM, et al. Produção do conhecimento em enfermagem acerca do empoderamento em situações crônicas de saúde. *Revista Enfermagem UERJ*. 2015; 23(3): 413-419.
- [9] Miranda NACG, et al. Práxis interdisciplinar de cuidado em grupo de pessoas que vivem com fibromialgia. *Revista Brasileira de Enfermagem*. 2016; 69(6): 1115-1123. PMID:27925088 <https://doi.org/10.1590/0034-7167-2016-0279>
- [10] Bastable SB. *O Enfermeiro como educador: princípios de ensino-aprendizagem para a prática de enfermagem*. 3rd ed. Porto Alegre: Artmed. 2010.
- [11] Barros LM. Construção e validação de uma cartilha educativa sobre cuidados no perioperatório da cirurgia bariátrica. 281 f. Dissertação (Mestrado) – Departamento de Enfermagem, Universidade Federal do Ceará, Fortaleza. 2015.

- [12] Bardin L. Análise de conteúdo. Lisboa: Edições 70, 2009.
- [13] Kruzik N. Benefits of preoperative education for adult elective surgery patients. *AORN Journal*. 2009; 90(3): 381-387. PMID:19735761 <https://doi.org/10.1016/j.aorn.2009.06.022>
- [14] Owers C, et al. Designing pre-bariatric surgery education: The value of Patients' experiences. *Journal of Diabetes Nursing*. 2017; 21(4): 119-125.
- [15] Neil JA, Roberson DW. Enhancing Nursing Care by Understanding the Bariatric Patient's Journey. *AORN Journal*. 2015; 102(2): 132-140. PMID:26227517 <https://doi.org/10.1016/j.aorn.2015.05.014>
- [16] Fencel JL, Walsh A, Vocke D. The Bariatric Patient: An Overview of Perioperative Care. *AORN Journal*. 2015; 102(2): 116-131. PMID:26227516 <https://doi.org/10.1016/j.aorn.2015.05.007>
- [17] Oliveira DM, et al. O grupo operativo como instrumento de aprendizagem do cuidado por mães de filhos com deficiência. *Revista da Escola Anna Nery*. 2016.
- [18] Melo MCH, Cruz GC. Roda de conversa: uma proposta metodológica para a construção de um espaço de diálogo no ensino médio. *Imagens da Educação*. 2014; 4(2): 31-39. <https://doi.org/10.4025/imageduc.v4i2.22222>
- [19] Lervolino SA, Pelicioni MCF. A utilização do grupo focal como metodologia qualitativa na promoção da saúde. *Revista Escola de Enfermagem da USP*. 2001; 35(2): 115-121. <https://doi.org/10.1590/S0080-62342001000200004>
- [20] Cestari VRF, et al. Nursing competencies in promoting the health of individuals with chronic diseases. *Revista brasileira de enfermagem*. 2016; 69(6): 1195-1203.
- [21] Organização Pan-Americana da Saúde; Organização Mundial da Saúde. Doenças crônicas não transmissíveis: estratégias de controle e desafios e para os sistemas de saúde. Brasília (DF) 2011. Available: http://apsredes.org/site2012/wp-content/uploads/2012/06/Condicoes-Cronicas_flavio1.pdf
- [22] Barefoot LC, Nadler EP. Nursing care of the adolescent patient undergoing laparoscopic sleeve gastrectomy. *Bariatric Nursing and Surgical Patient Care*. 2012; 7(3): 116-120. <https://doi.org/10.1089/bar.2012.9971>
- [23] Santos MRM, Sousa CS, Turrini RNT. Percepção dos pacientes submetidos à cirurgia ortognática sobre o cuidado pós-operatório. *Revista da Escola de Enfermagem da USP*. 2012; 46: 78-85. <https://doi.org/10.1590/S0080-62342012000700012>
- [24] Mendes KDS, et al. Intervenção educativa para candidatos ao transplante de fígado. *Revista Latino-americana de Enfermagem*. 2013; 21(1): 419-425.
- [25] Balduf LM, et al. The impact of socioeconomic factors on patient preparation for bariatric surgery. *Obesity Surgery*. 2009; 19(8): 1089-1095. PMID:19517200 <https://doi.org/10.1007/s11695-009-9889-4>
- [26] Goldstein N, Hadidi N. Impact of Bariatric Pre-Operative Education on Patient Knowledge and Satisfaction with Overall Hospital Experience. *Bariatric Nursing and Surgical Patient Care*. 2010; 5(2): 137-144. <https://doi.org/10.1089/bar.2010.9923>
- [27] Akamine AMBC, Ilias EJ. Por que avaliação e preparo psicológicos são necessários para o paciente candidato à cirurgia bariátrica?. *Revista da Associação Médica Brasileira*. 2013; 59(4): 316-317. PMID:23855978 <https://doi.org/10.1016/j.ramb.2013.06.001>
- [28] Fonseca LMM, et al. Tecnologia educacional em saúde: contribuições para Enfermagem pediátrica e neonatal. *Escola Anna Nery Revista de Enfermagem*. 2011; 15(1): 190-196.
- [29] Nunes J, et al. Promoting health in the hospital from the viewpoint of the nurse: descriptive-exploratory study. *Online Brazilian Journal of Nursing*. 2009.
- [30] Gagnon LE, Sheff EJK. Outcomes and Complications After Bariatric Surgery. *American Journal Nursing*. 2012; 112(9): 26-36. PMID:22902899 <https://doi.org/10.1097/01.NAJ.0000418920.45600.7a>
- [31] Echer IC. Elaboração de manuais de orientação para o cuidado em saúde. *Revista Latino-americana de Enfermagem*. 2005; 13(5): 754-757. <https://doi.org/10.1590/S0104-11692005000500022>
- [32] Oliveira MS, et al. Avaliação de manual educativo como estratégia de conhecimento para mulheres mastectomizadas. *Revista Latino-Americana de Enfermagem*. 2012; 668-676.
- [33] Barros E JL, et al. Gerontotecnologia educativa voltada ao idoso estomizado à luz da complexidade. *Revista Gaúcha de Enfermagem*. 2012; 33(3): 95-101. PMID:23155586 <https://doi.org/10.1590/S1983-14472012000200014>
- [34] Sarno F, Canella DS, Bandoni DH. Mobile health e excesso de peso: uma revisão sistemática. *Revista Panamericana de Salud Pública*. 2014; 35(5): 424-431. PMID:25211571
- [35] Correa AA, Santos JLG, Erdmann AL. Biblioterapia como tecnologia de cuidado de enfermagem na Estratégia Saúde da Família. *Saúde & Transformação Social*. 2013; 4(1): 39-46.