THE PREOPERATIVE VISIT AS THE ANXIETY MITIGATING FACTOR IN SURGICAL PATIENTS

A visita pré-operatória como fator atenuante da ansiedade em pacientes cirúrgicos La visita preoperatoria como un factor atenuante de la ansiedad en pacientes quirúrgicos

Thiago Franco Gonçalves¹, Veronica Cecilia Calbo de Medeiros²

ABSTRACT: Objective: To identify if the preoperative visit would be a factor that enables us to minimize the level of anxiety in surgical patients. **Method:** Exploratory prospective research with 20 patients who were subjected to total or partial hysterectomy, for any surgical technique. **Results:** After the application of the State-Trait Anxiety Inventory, it was identified that the control group presented higher anxiety levels when compared to the research group. **Conclusion:** Preoperative nursing visits contributed to the lower level of anxiety among those who receive it. **Keywords:** Hysterectomy. Perioperative nursing. Anxiety. Preoperative period.

RESUMO: Objetivo: Identificar se a realização da visita pré-operatória seria um fator que possibilita minimizar o nível de ansiedade apresentado por pacientes cirúrgicos. Método: Pesquisa de caráter exploratório prospectivo, com amostra de 20 pacientes que foram submetidas ao procedimento de histerectomia total ou parcial, por qualquer técnica cirúrgica. **Resultados:** Após a aplicação do Inventário de Ansiedade Traço-Estado, foi identificado que o grupo controle apresentou nível de ansiedade superior quando comparado ao grupo pesquisa. **Conclusão:** A visita de enfermagem pré-operatória contribuiu para que o nível de ansiedade seja inferior nos que a recebem.

Palavras-chave: Histerectomia. Enfermagem perioperatória. Ansiedade. Período pré-operatório.

RESUMEN: Objetivo: Identificar si la realización de la visita preoperatoria sería un factor que posibilitaría la minimización del nivel de ansiedad presentado por los pacientes quirúrgicos. **Método:** Investigación exploratoria y prospectiva, con una muestra compuesta por 20 pacientes que fueron sometidas al procedimiento de la histerectomía total o parcial por cualquier técnica quirúrgica. **Resultados:** Después de la aplicación del Inventario de la Ansiedad Seguimiento-Estado, se identificó que el Grupo Control presentó un mayor nivel de ansiedad comparado al grupo de la investigación. **Conclusión:** La visita preoperatoria de enfermería contribuye para que el nivel de ansiedad sea menor en los pacientes que la reciben. Palabras clave: Histerectomía. Enfermería perioperatoria. Ansiedad. Período preoperatorio.

¹Nurse. Expert in Surgical Center Nursing. Surgical Center at Hospital e Maternidade São Luiz, Unidade Brasil. E-mail: thigo.enf@hotmail.com

Rua Savigni, 199 – Vila Alpina – CEP: 03203-030 – São Paulo (SP), Brazil. ²Nurse. Master's degree in Adult Health. Professor at Centro Universitário São Camilo. E-mail: veronicacalbo@terra.com.br Received: 13 Nov. 2015. Approved: 28 Mar. 2016

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INTRODUCTION

Patients who are admitted to health-care institutions to undergo a surgical procedure are usually not informed and advised properly. This lack of knowledge regarding the procedures to which the patient will be submitted triggers many emotions in the individuals¹.

Therefore, these emotions are directly related to the feeling of anxiety, which is defined by the North American Nursing Diagnosis Association as:

> [...] a vague, uneasy feeling of discomfort or dread accompanied by an autonomic response (with the source often nonspecific or unknown to the individual); a feeling of apprehension caused by anticipation of danger. It is an altering signal that warns of impending danger and enables the individual to take measures to deal with threat².

Anxiety can also be defined as a "sensation of psychic uneasiness characterized by the fear of impending danger, both real and imaginary"³. Stress, on the other hand, is any event, be it real or imaginary, that affects the stability of the body, even if subtly.

The anxiety presented by individuals facing stressful factors can be beneficial when associated with the mechanism of "struggle or escape", where the activation of the central nervous system releases adrenaline and corticoid hormones to promote fast cell activation; however, in situations such as the anesthesia, this feeling may lead to changes in vital signs parameters – due to the same mechanism –, such as blood pressure elevation, dry mouth, sweating, palpitations, shivering, vomit, increased respiratory, and cardiac rate^{5,6}.

The stressful factor can be internal or external, in cases in which there is a cognitive evaluation of the individual that classified it as a threat (negative stimulus) or a challenge (positive stimulus), when the stimulation of the body occurs because of the release of catecholamine and corticoisteroids⁷.

The activation of the hypothalamus, in a stressful event, triggers two types of stimuli: an electrical and a chemical one. The electrical stimulus works on the adrenal medulla, in charge of releasing epinephrine in the bloodstream; and the chemical one, generated by the adrenocorticotropic hormone (ACTH), activates the zona fasciculata of the adrenal cortex, causing the release of cortisol and preparing the body to fight or escape⁴.

The general response of adaptation to stress was described by the sequence of how stress manifests itself and interacts with the body and the environment in three stages: warning, resistance, and exhaustion⁸.

In the first warning stage, the individuals have sensations that, in some cases, are not attributed to stress, such as paleness, tachycardia, and tachypnea; these are the attempts of the body to provide vital organs with blood, and consequently, energy. During the second stage of resistance, the body tries to reestablish homeostasis, and, if this balance is reached, some of the initial signs and symptoms may disappear; however, if not, the person goes into the third stage of exhaustion⁸.

Exhaustion is the body's inability to reestablish base balance, which may lead to irreversible physiological damage⁸.

So, there was an attempt to quantify the degree/level of anxiety presented by the individuals.

The State-Trait Anxiety Inventory (STAI) was a result of evaluations and selections from items in three other scales addressed to measuring anxiety: the Taylor Manifest Anxiety Scale, the Welsh Anxiety Scale, and the IPAT Anxiety Scale (Impact = Population x Affluence x Technology)⁹.

In this inventory, anxiety is divided into two types: trait and state. Trait (STAI-T) is related to the individual's propensity to face anxiety in the routine, and state (STAI-S) is an isolated, transitory fact resulting from a specific moment in life¹⁰.

A study¹¹ analyzed 360 surgical patients. Of these, only 1 patient was not anxious, whereas the others comprised the groups of medium (114 individuals; 31.7%) and high (245 individuals, 68.1%) level of anxiety, using the STAI-S Scale.

The preoperative period is the perfect moment for the contact between the nurse and the patient, when the professional can give the necessary information about the anesthetic and surgical procedures and promote an efficient emotional preparation of the patient. The information is vital to minimize the level of anxiety of the patient¹².

The preoperative nursing visit is part of the systematization of the preoperative nursing care, and this is the first stage of this system. Among the activities of the nurse, informing and advising the patient about the surgery, thus minimizing anxiety, stands out⁹.

At the visit, the nurse should transmit the information to the patient individually, focusing on his or her specific needs, making sure the patient knows everything he or she needs to know. It is important to keep a logical sequence of the information, so that understanding is easier¹³.

Therefore, if the patient is informed and has no doubts, complications in the postoperative period can be prevented¹².

The motivation to perform this study came from the author's experience, with the anxiety verbalized by patients during admittance to the surgical center, which led to the research question: Could the preoperative nursing visit be an anxiety mitigating factor for patients?

So, this study aims at identifying that the patients who will be visited by nurses before surgery will have lower levels of anxiety indicated by the STAI-S Scale.

OBJECTIVE

To identify if the preoperative visit can be an anxiety mitigating factor for surgical patients.

METHOD

This is an exploratory, descriptive, and prospective study.

The study was conducted in a major private hospital in the state of São Paulo, in the region of ABC. The study was conducted after the Board's and the Research Ethics Committee approval (CAAE n. 44715115.2.0000.0062) in July 2015.

On the basis of the exposed, the STAI-S (Appendix 1) was chosen, since it adjusts to the situation of the patient (the moment of surgery) and the objective of this study. This inventory is composed of a questionnaire containing 20 simple questions and preestablished answers, such as "very much so", "moderately so", "somewhat", and "not at all", and scores are, respectively, 4, 3, 2, 1. So, the values range from 20 to 80 points. The scores obtained in this inventory are characterized as mild anxiety (20 - 40 points), moderate anxiety (41 - 60 points) and severe anxiety (61 - 80 points).

In items 1, 2, 5, 8, 10, 11, 15, 16, 19, and 20 of the anxiety inventory, the scores should be opposite to the others. That is, the scores do not follow the pattern 1 to 4, but 4 to 1 (decreasing order), because these items in the inventory present statements that are opposite to the others.

Inclusion criteria were established to compose the sample of this study, as follows: elective surgical procedures; client/patient admitted to the institution; total or partial hysterectomy; and possibility of communication between the researcher and the client/patient. Illiterate patients were excluded from the sample.

The choice to conduct the study among female patients who were submitted to hysterectomy was based on the premise that this surgery is considered to be mutilating, interfering with their femininity and sexuality¹⁴.

The sample comprised 20 clients/patients who were distributed into two groups: a study group and a control group, selected in a previous raffle, being 10 in the study group and 10 in the control group. The raffle occurred as follows: before data collection, a table was numbered from 1 to 20 (corresponding to the number of participants in the study, and pieces of paper were made with the expressions "with visit" and "without visit", being 10 to each, folded equally, and placed in a dark bag. They were mixed and taken one at a time, thus defining if the visit would or would not be conducted.

When the patient accepted to participate in the study, she was inserted in the list, according to the numerical order. The study group was formed by patients who received the preoperative nursing visit. On the other hand, the control group did not receive it. The visit took place one hour before surgery in a reserved room, respecting and securing the patient's privacy. This sample number was defined according to the time to conduct the study.

In both groups, patients were advised about the objective of the study, guaranteeing the anonymity and the possibility to interrupt their participation at any time, without onus, according to Resolution n. 466/12, from the National Health Council in the Ministry of Health. They were asked to sign the Informed Consent Form, which was also signed by the researcher in charge of the study.

During the visit, the researcher nurse informed the client/ patient about the period comprehending the perioperative space (from preparation for the procedure until discharge from the post-anesthesia recovery room). The interviewed party was informed she could interrupt the visit at any time to ask questions, in order to clarify all the doubts. The research was conducted in the preoperative period, one hour before surgery, in two stages. The first stage had a social questionnaire for the participant to identify personal data, filled out by the researcher. They were asked data (such as age, experiences with other surgical procedures, schooling, and intercurrences in the anesthesia and surgery), which were analyzed and compared with the STAI-S Scale.

The second stage of the research was the application of the STAI-S Scale, immediately after the conclusion of the social questionnaire, still in the preoperative period. This stage can be considered as the third for the study group, because the nursing visit took place before the application of the inventory, and the participant filled out the form, since there were answers regarding how she felt, and that could not suffer interferences from third parties. If the participant had any doubts about the content of the statements in the inventory, she could be advised by the researcher; however, the latter could not interfere in the responses. All the stages of the study were conducted before the patient underwent surgery.

RESULTS AND DISCUSSION

The social results collected in the study are presented separately between the control and study groups to characterize each one better. The same occurs as to the need to identify the age of the participants, once each generation is influenced by different cultures, beliefs, and ways to access information.

Therefore, the mean age of the patients in the control group (group of patients who were not visited by the nurses) was 45.4 years. Referring to schooling, the percentage of patients who had gone to high school was 70%, whereas 10% had incomplete higher education and 20% had complete higher education.

All patients had undergone a surgical procedure before hysterectomy (100%), and only 20% (2 patients) presented some kind of anesthetic or surgical intercurrence, such as nausea, vomit, and pain.

In the study group, mean age was 43.2 years; therefore, both groups had similar mean age. In this group, 40% of the participants had gone to high school, 20% had incomplete higher education, 30% had complete higher education, and 10% had done postgraduate courses.

The percentage of patients who had undergone any surgical procedure before hysterectomy was 100%. Of these, 10% presented anesthetic or surgical intercurrences (dyspnea) and 90% denied such events. The patients in the control group had an average of 45.8 points in the STAI. Therefore, this group had moderate level of anxiety, whereas the study group had 36.3 points, indicating mild level of anxiety.

The fact that all patients had undergone another type of surgery could contribute with the lower level of anxiety in both groups, once one of the factors for severe anxiety is the threat of the unknown, considering the anesthesia and the surgery environment; however, that was not observed.

It is worth mentioning that this study is considering only the fact that this was not the first experience they had in terms of anesthesia, and that they had been to a surgical center at least once before, but the specificity of the surgery and the reasons why it was indicated should also be considered.

Anxiety is the nursing diagnosis that presents itself more frequently in the preoperative period of patients who will undergo surgery, as shown in a study¹⁵ in which 86.6% patients presented this nursing diagnosis.

As defended in another study¹⁶, it was observed that patients who receive information about the procedures to which they would be submitted during anesthesia and surgery can reduce the stressful factor, and, consequently, the level of anxiety.

This idea is corroborated by another study¹⁷ defending the preoperative nursing visit as a relevant act for biopsychosociospiritual care, making the surgery a more comfortable moment for the patient, thus reducing or preventing stressful events.

Another study¹⁸ showed that the anxiety presented in the preoperative period affects 44.3% patients.

Therefore, it is possible to state that the preoperative nursing visit is an important instrument to be used by the nurse in this period, backed by the Nursing Law n. 7,498/86, art. 11, clause I, paragraph i¹⁹.

Another study²⁰ mentioned that such orientations should be provided in the mediate preoperative period so that patients have time to understand the information. However, during the study, this variable was not observed, once the nursing visit was conducted in the immediate preoperative period.

The questions asked by most patients in the study group during the nursing visit were not directly related with the surgical procedure or the anesthesia, but, instead, if they would gain weight after the surgery. That shows concern with physical appearance, and not with the possible immediate and mediate postoperative restrictions that can be caused by hysterectomy. This can be considered as a limiting research factor, since it is not approached in the questionnaire.

CONCLUSION

This study could identify that anxiety, as a nursing diagnosis, is present among patients who will undergo surgery, thus proving the study hypothesis that patients who are visited by nurses before surgery present lower levels of anxiety in comparison to those who are not visited. It is important to mention that the preoperative nursing visit is part of the perioperative period, and its absence makes the process more fragile, interfering directly with the patient. Anxiety may be psychological; however, it works on the body and produces changes in vital signs, which can lead to the cancellation or postponement of the surgery. That can create more anxiety and become a vicious cycle.

This study aims at contributing with the nursing practice in the preoperative period regarding the emotional care of the surgical patient, which is as important as the physical preparation.

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Appendix 1. Anxiety inventory.

Read the questions below and answer, with an X, the column that indicates how you feel now, before the surgical procedure.

N٩	Question	Not at all	Somewhat	Moderately so	Very much so
01	I feel calm				
02	I feel secure				
03	I am calm				
04	I feel strained				
05	I feel comfortable				
06	I feel upset				
07	I feel presently worrying over possible misfortunes				
08	I feel rested				
09	I feel anxious				
10	I feel "at home"				
11	I feel confident				
12	I feel nervous				
13	l am agitated				
14	I feel like a "nervous wreck"				
15	I am relaxed				
16	I feel satisfied				
17	l am worried				
18	I am very excited and confused				
19	I feel happy				
20	I feel good				