Identification of the defining characteristics of fear and anxiety in patients scheduled for gynecological surgery*

Identificação das características definidoras de medo e ansiedade em pacientes programadas para cirurgia ginecológica

Identificación de las características definidoras de miedo y ansiedad en pacientes programadas para cirugía ginecológica

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ABSTRACT

Objectives: To identify defining characteristics of fear and anxiety during the immediate preoperative period in patients scheduled for gynecological surgery, and to diagnose preoperative anxiety syndrome. Methods: This was a cross-sectional study with 50 patients from the gynecological unit of the São Paulo hospital. Data was collected in May 2007. Results: Preoperative anxiety syndrome was diagnosed in 48 of the participants (96.0%). Conclusion: Participants had clinical symptoms leading to the diagnosis of preoperative anxiety syndrome. Keywords: Nursing Diagnosis; Fear; Anxiety; Gynecologic Surgical Procedures; Intraoperative Period

RESUMO

Objetivos: Identificar a presença das características definidoras Medo e Ansiedade no pré-operatório imediato de 50 pacientes submetidas à cirurgia ginecológica, e verificar a Síndrome da Ansiedade Perioperatória. Métodos: Estudo de coorte de caráter transversal teve como objetivo Realizado na Unidade de Ginecologia do Hospital São Paulo em maio de 2007. Resultados: Confirmou-se a presença dos diagnósticos de interesse em 48 pacientes (96,0%) do total de 50 mulheres (100,0%). A Síndrome da Ansiedade Perioperatória foi identificada em 48 (96,0%) das pacientes. Conclusão: A pesquisa comprovou a presença dos diagnósticos Medo e Ansiedade, devido às manifestações clínicas, também contribuintes para evidenciar a Síndrome da Ansiedade Perioperatória

Descritores: Diagnóstico de Enfermagem; Medo; Ansiedade; Procedimentos Cirúrgicos em Ginecologia; Período Intra-Operatório

RESUMEN

Objetivos: Identificar la presencia de las características definidoras de Miedo y Ansiedad en el pre-operatorio inmediato de 50 pacientes sometidas a cirugía ginecológica, y verificar el Síndrome de Ansiedad Perioperatoria. Métodos: Este estudio de cohorte de carácter transversal tuvo como objetivo fue realizado en la Unidad de Ginecología del Hospital Sao Paulo en mayo del 2007. Resultados: Se confirmó la presencia de los diagnósticos de interés en 48 pacientes (96,0%) de un total de 50 mujeres (100,0%). El Síndrome de Ansiedad Perioperatoria fue identificada en 48 (96,0%) de las pacientes. Conclusión: Con la investigación se comprobó la presencia de los diagnósticos Miedo y Ansiedad, debido a las manifestaciones clínicas, también contribuyentes para evidenciar el Síndrome de Ansiedad Perioperatoria.

Descritores: Diagnóstico de Enfermería; Miedo; Ansiedad; Procedimientos Quirúrgicos Ginecológicos; Periodo Intraoperatorio

* Study developed in the premises of the Gynecology Unit of the Hospital São Paulo, associated to the University Complex of the Universidade Federal de São Paulo/ UNIFESP. São Paulo (SP), Brazil.

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INTRODUCTION

While undergoing a surgical procedure, patients experience stressful situations, which can change the dynamics of life. The unknown can trigger negative reactions, such as non-adherence to the treatment, changes of self-esteem and body image, psychological changes generated by fearing death and anxiety relating to not knowing on the anesthetic procedures and the surgery itself(9).

Studies suggest that patients while facing a frightening reality, such as a surgery, develop tension levels that compromise the emotional, physiological and cognitive abilities. The emotional states of fear and anxiety are often witnessed, important physiological and psychological changes can be noticed and detected in patients undergoing large surgical procedures, or related to sexual organs such as in urogynecology surgeries(2-3).

The nurse performance is crucial in such important moments of a patient’s life and should be able to evaluate the patient in immediate preoperative, in order to minimize possible behavioral complications, which can affect the post-surgical recovery(2). A detailed examination of patient’s emotional condition in such critical moment, in addition to physical examination, through nursing procedure, allows the nurse to establish an integral nursing diagnosis and trace possible interventions for the patient(4).

“Fear” as a nursing diagnosis(5) is defined as “Response to the threat perceived, which is consciously recognized as danger”. Anxiety is defined as a vague and discomforting feeling, or dread, followed by autonomic answer (the source is frequently not specified or unknown for the individual); apprehension feeling caused by the anticipation of danger. It is an alert that calls attention to an imminent hazard, which allows the individual to make decisions to lead with the threat.

Research shows that patients who had a high score of fear also had a high anxiety score(6). That strong correlation constitutes a justification for defending the existence of a syndrome resulting from the set of manifestations of both fear and anxiety nursing diagnosis study(3). Some authors(7-8) have mentioned in their studies the presence of a possible anxious syndrome.

The perioperative anxiety syndrome is defined as an emotional state with psychological and physiological elements(9), with diffuse apprehension feelings, uncertainties, impotence, unpleasant and discomfort sensations, of a vague and unspecified nature associated to alienation and insecurity(8-9).

OBJECTIVES

The study objectives are:
- Identify the presence of nursing diagnostics signs and symptoms for fear and anxiety in immediate preoperative patients undergoing gynecological elective surgeries.
- Identify the presence of signs and symptoms of the perioperative anxiety syndrome.

METHODS

The study has been developed within a prospective and descriptive character(10). The research was executed after the project’s approval from the Research Ethical Committee of the Universidade Federal de São Paulo and developed in the premises of the Gynecology Unit of the Hospital São Paulo, associated to UNIFESP university complex.

The study sample population was composed by 50 women undergoing gynecological elective surgeries, in immediate preoperative phase. The study included 48 patients who had at that stage the nursing diagnoses anxiety and fear proposed for this research.

Inclusion criteria were: patients over 18 years, undergoing elective gynecological surgeries, and aware that they were not under the effect of anesthetic premedication, who agreed to voluntarily participate in the study after signing the Term of Free and Cleared Consent.

An instrument elaborated and validated by previous study (Appendix 1)(9) was used for data gathering.

A training program for the interviewers (two fourth-grade students in undergraduate nursing / UNIFESP) was executed by the counselor, to improve the interview techniques and optimize completion of the instrument, being pre-tested with five patients. With such training program, data gathering was made daily at the gynecology ward of the Hospital São Paulo.

After detailing the objectives of this research and after signing the referred Term, both the interview and the physical examination took place in immediate preoperative phase. If these defining characteristics (signs and symptoms) of fear and anxiety diagnoses were present, data were recorded on the instrument, as well as factors related to nursing diagnoses for study and “perioperative anxiety syndrome” developed in a previous study (Appendix 2)(10).

Data: the data collected were tabulated and submitted to descriptive analysis, in absolute percentage.

RESULTS

Relating to the issue of having previously undergone a surgery, 65.5% of patients had had a previous surgery experience. The most frequent surgical specialties include 25.0% of total abdominal hysterectomy, 21.0% of vaginal hysterectomy, 16.7% of laparoscopic and hysteroscopic...
surgery 16.4%, 12.5% of exploratory laparotomy, and 4, surgical conization 2% and 4.2% salpingo-oophorectomy in 48 patients who had the nursing diagnoses in question.

It is evident, in Fig.3 that the defining characteristics of perioperative anxiety syndrome present in 46 patients present high frequency rate (equals or above 70.0%) such as: apprehension and verbally reported anxiety at 95.8% respectively; verbalization and anguish at 93.7% respectively; excitement and restlessness at 91.6% respectively, dry mouth 87.5%, and respectively nervousness and fearing death at 70.0%.

**Figure 1** – Presence or absence of the nursing diagnosis – Fear and Anxiety in patients of a gynecology unit of a university hospital. São Paulo, 2007

![Figure 1](image1)

It is verified in Figure 1 that from the total of 50 interviewed patients, the nursing diagnosis in question was present in 48 of them (96.0%).

**Figure 2** – Presence or absence of the Perioperative Anxiety Syndrome in patients from the gynecology unit of a university hospital, São Paulo, 2007

![Figure 2](image2)

Figure 2 shows that from the total of 48 patients showing the nursing diagnosis of Fear and Anxiety, the perioperative anxiety syndrome was observed in 46 of them (96.0%).

**Figure 3** – Defining characteristics of the perioperative anxiety syndrome, identified in patients from the gynecology unit of a university hospital. São Paulo, 2007

![Figure 3](image3)

It is evident, in Fig.3 that the defining characteristics of perioperative anxiety syndrome present in 46 patients present high frequency rate (equals or above 70.0%) such as: apprehension and verbally reported anxiety at 95.8% respectively; verbalization and anguish at 93.7% respectively; excitement and restlessness at 91.6% respectively, dry mouth 87.5%, and respectively nervousness and fearing death at 70.0%.

**DISCUSSION**

While comparing nursing diagnosis clinical symptoms of fear and anxiety in the 48 patients selected for this study, with medical diagnostics of gynecological tumors and other gynecological problems (endometrial polyps and vaginal prolapse), we observed this population did not present qualitative or quantitative differences referring to the defining characteristics of the diagnoses being studied.

There was no difference regarding the percentage of nursing diagnoses anxiety and fear among the 22 patients (46.0%) with a diagnosis of tumor, undergoing surgery to hysterectomy / vaginal hysterectomy, and the remaining 26 patients (54.0%) carriers of other gynecological problems. Therefore, the patients in question had similar incidence in the identification of nursing diagnoses in the study, regardless of medical diagnosis and surgical approach, in contrast to the findings of earlier research(3).

The results in Figure 1 on the presence of fear and anxiety diagnoses show high percentages of frequency. Considering surgical procedure patients would undergo, also related to procreation or involving sexual organs procedures, it was confirmed such patients had high levels of fear and anxiety.

Confirmation of the existence of an anxiety
syndrome, the syndrome of perioperative anxiety, observed in Figure 2 (96.0%) was identified by the high percentage indices of the defining characteristics of the two nursing diagnoses: fear and anxiety\(^{(3,7,8)}\).

It is interesting to note in Figures 3 and 4, respectively, that the high frequency rate of defining characteristics (found in more than 70.0% of patients) and associated factors confirm the presence of a possible syndrome involving the two nursing diagnoses in this study, i.e., the Perioperative Anxiety Syndrome\(^{(3,8,11)}\).

Nurse’s abilities on propaedeutic techniques associated to the knowledge on physiology and physiopathology will contribute effectively to identify the clinical diagnoses mentioned and the attribution of the referred anxious syndrome\(^{(3,4)}\).

CONCLUSION

This research identified the presence of defining characteristics for the nursing diagnoses of Fear and Anxiety in immediate preoperative patients for gynecological elective surgeries, which are: apprehension and verbally reported anxiety respectively at 95.8%, verbalization and anguish at 93.7% respectively, excitement and restlessness at 91.6% respectively, dry mouth at 87.5%, nervousness and fearing death at 70.0% respectively.

The Perioperative Anxiety Syndrome was present in 96% of the interviewed patients, and key related facts are: anesthetic (93.7%); surgery (62.5%), post-operative (58.3%) and hospitalization (35.4%).

Data analyzed in the present study confirm the findings of other conducted surveys, being the diagnoses of Fear and Anxiety identified in patients given their exposure to stressful situations, such as surgical interventions to which they would undergo, and reinforce the importance of nurses performance while carrying out more systemized nursing care, in view of the patients necessity of attention and care in the moment before surgery.

REFERENCES

Appendix 1

Patient Data Gathering Instrument

Name: ____ RH: _____ Hospital Bed: ________
Date: __/__/__ Age: ____ Gender: ( ) F ( ) M Education: ( ) Elementary ( ) Secondary ( ) Undergraduate Profession: ______
Religion: ( ) Catholic ( ) protestant ( ) spiritualist ( ) Buddhism ( ) other Race: ( ) Caucasian ( ) Black ( ) Yellow ( ) Other________
Marital Status: ( ) single ( ) married ( ) divorced ( ) widow / Cultural Origin__________________________________________
Place of Birth: ( ) capital ( ) interior ( ) other state ( ) other country / Nationality: ( ) Brazilian ( ) Foreigner
Surgery type ___________________________________________ Medical diagnostic _______________________________________
Base sicknesses ______ _______ Allergies ______ __________ Medications in use ____________

Fear – response to a perceived threat which is consciously recognized as a danger. (NANDA, 2006)

( subjective signs ) *
1. Apprehension (DC): vague uncertainty, concern with facts, acts or phenomena that can be disturbing and unbalancing. Fright, suspicious, concern; apprehension for what is going to happen. Comprehension, knowledge; apprehension of the notions of time and space
2. Increased Tension (DC): State of tension. Stiffness in certain parts of the body. Great physical or mental concentration. State or quality that is tense. State of rigidity that manifests itself in certain parts of the body. Excitement, nervousness. Situation that could trigger a break, a conflict.
4. Nervousness (DC): exacerbated emotionality; irritation, impatience. State characterized by changes of the nervous system. State of nervous excitement either temporary or permanent; being nervous. State of an anxious individual who can present varied psychosomatic problems.
5. Verbalization (Identifies the object of fear) (DC): The patient can report this sensation during the interview. Can be measured as absent (=0) or present (=1)

( objective signs ) *
6. Increased Pulse (DO): increase in frequency of heart contractions perceived in an artery.
7. Nausea (DO): Discomfort in the region of the stomach, with a tendency to vomiting, regurgitation.
8. Vomit (DO): act or effect of vomit, the material expelled by those who spew.
9. Fatigue (DC): feeling of tiredness when performing small activities. There may be changes of respiratory frequency, reported shortness of breath, depression, weakness. Physiological state following upon a prolonged effort to intellectual or physical labor intensive and that translates in difficulty in continuing this effort or work, fatigue, exhaustion. Painful sensation caused by stress or hard work (muscle effect), fatigue
10. Increased Respiration Rate (DC): increasing the number of breaths per minute, taking as parameter values for adults 12 to 22 hp / m.
11. Increased Perspiration (DO): Observation of profuse sweating in the patient. As in terms of the absence or presence, may be generalized or localized, eg, hands, feet, face, armpits. Special attention to this characteristic because it may happen that some patients have intense sweating, as in cases of hyperhidrosis. Can be evaluated as absent (=0), low (=1, only one region of the body eg hands), moderate (=2, when two or more regions are affected as hands and feet, face and armpits) and intensive (=3, when present throughout the body).
12. Dry mouth (DC): decreased production of saliva which leaves the mouth dry, no humidity, a feeling of dryness in the mouth

Score

Continue ...

Identification of the defining characteristics of fear and anxiety in patients scheduled for gynecological surgery

Anxiety - a vague and uncomfortable feeling of discomfort or dread, accompanied by an autonomic response, a feeling of apprehension caused by anticipation of danger.

It is a warning sign that calls attention to an imminent danger and allows the individual to take measures to deal with the threat. (NANDA, 2006).

<table>
<thead>
<tr>
<th>Affective signs and symptoms *</th>
<th>Score</th>
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<tbody>
<tr>
<td>1. Apprehension (DO): Act of grasping, suspicion, concern; be apprehensive of the unknown, understanding, knowledge.</td>
<td></td>
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<tr>
<td>3. Tension (DO): State of tension. Stiffness in certain parts of the body. Great physical or mental concentration. State or quality that is tense. State of rigidity that manifests in certain parts of the body. Excitement, nervousness. Situation that could trigger a break, a conflict.</td>
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<tr>
<td>4. Restlessness (DO): Agitation, disquieting, restless, distress. That is not quiet, agitated by fear or uncertainty.</td>
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<td>5. Anguish (DC): Physical sensation accompanied by painful oppression, agony, distress, seizure. Deep disquiet that oppresses the heart. Fear diffuse and may range from unease to panic. It also refers to grievous bodily impressions as chest tightness or larynx. Some authors distinguish anxiety (psychic phenomena) of distress (physical phenomenon).</td>
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<tr>
<td>6. Anxious (DO): It is reported by patients or observed by the signs: anxiety, apprehension, worry, impatience, greed, physiological changes. In practice the two terms are synonymous&quot;; (PIERON, 1978).</td>
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</tr>
<tr>
<td>7. Abnormal respiratory rate (DO): Increasing the number of breaths per minute, taking as parameter values for adult is 12 to 22 bpm.</td>
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<tr>
<td>8. Increased pulse (DC): Increase of the frequency of the contractions of the heart perceived in a human body artery.</td>
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<tr>
<td>9. Dry mouth (DC): Decreased production of saliva, which leaves the mouth dry, no humidity, a feeling of dryness in the mouth.</td>
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<tr>
<td>10. Increased perspiration (DO): Observation of intensive sweating in the patient. As in terms of the absence or presence, may be generalized or localized, eg. hands, feet, face, armpits. Special attention to this characteristic because it may happen that some patients have intense sweating, as in cases of hyperhidrosis. Can be evaluated as absent (=0), low (=1), only one region of the body eg hands), moderate (=2, when two or more regions are affected as hands and feet, face and armpits) and intense (=3, when present throughout the body).</td>
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Related Factor Anesthetic • Surgery • hospitalization • Disease • post-operative • Lack of familiarity with experience • Environmental • Other • (SURIANO, MLE; MICHEL, JLM; BARROS, ALBL, 2008).

(physiological signs and symptoms) *

7. Abnormal respiratory rate (DO): Observe the increase or decrease of number of breaths for one minute, with reference to the frequency of patient. Observe the variation in the depth and regularity of breathing, indicated in terms of presence or absence, for a minute or the period that deemed necessary. Can be evaluated as normal, with BF = 12-22 bpm, and abnormal when the value is above the reference value. Should be compared to previous parameters.

8. Increased pulse (DC): For verifying pulse the examiner uses the index and the middle fingers placing and pressing both over the patient artery, being counted the number of pulsations during one minute, being evaluated not only the frequency rate but also its amplitude, presence of arhythmias or thread pulse; full. Normally the selected artery is the radial artery, followed by the brachial, carotid, femoral, pedis, popliteal. It can be considered normal pulse between 60-100 beats/min or abnormal above 100 beats/min and should be compared with previous parameters.

9. Dry mouth (DC): Decreased production of saliva, which leaves the mouth dry, no humidity, a feeling of dryness in the mouth.

10. Increased perspiration (DO): Observation of intensive sweating in the patient. As in terms of the absence or presence, may be generalized or localized, e.g. hands, feet, face, armpits. Special attention to this characteristic because it may happen that some patients have intense sweating, as in cases of hyperhidrosis. Can be evaluated as absent (=0), low (=1), only one region of the body e.g. hands), moderate (=2, when two or more regions are affected as hands and feet, face and armpits) and intense (=3, when present throughout the body).

Continue ...
11. Fatigue (DC): feeling of tiredness when performing small activities. There may be changes of respiratory frequency, reported shortness of breath, depression, weakness. Physiological state following upon a prolonged effort to intellectual or physical labor intensive and that translates into difficulties in continuing this work or effort, fatigue, exhaustion. Painful sensation caused by stress or hard work (muscle effect), fatigue.

11. Fatigue (DO): observe the frequency, type of activity that causes fatigue, time of day, if there is change in respiratory rate. Is there a correlation between the reported fatigue and insomnia or interrupted sleep? What are the activities performed that cause fatigue, or is it constant? Such behavior can be observed by the interviewer or narrated by the patient, and should be validated with the patient. Can be evaluated as absent (=0) or present (=1).

12. Tearful (DC): That cries a lot. Distressed, wailing, complaining.

12. Tearful (DO): Verbal reports of crying or direct observation by the interviewer. Can be measured as: Absent (=0) or present (=1).

13. Urinary urgency (DC): What should be done without delay, which is short, fast, urgent, imminent. Uncomfortable feeling of impending leakage.

13. Urinary urgency (DO): Can be reported by the patient or observed by the interviewer, can be measured as absent (=0) or present (=1).


14. Nausea (DO): this behavior can be observed by the interviewer or may be reported by the patient, observe the frequency, duration and correlation with odors, foods, situations. May be absent (=0) or present (=1).

15. Vomit (DC): act or effect of vomit, the material expelled by those who spew.

15. Vomit (DO): such behavior can be observed by the interviewer or narrated by the patient, observe frequency, duration, aspect and correlation to smells and foods. This reaction can be absent (=0) or present (=1).

(Behavioral signs and symptoms) *

16. Insomnia (DC): Deprivation, lack of sleep. Vigil, impossibility or difficulty to falling asleep or sleeping enough, interrupted sleep without being able to reconcile again

16. Insomnia (DO): Reported insomnia or difficulty of maintaining sleep. Can be defined as: Difficulty to falling asleep (or sleep) absent (=0) or present (=1). Sleep interrupted by periods of insomnia: absent (=0) or present (=1).

17. Tremor voice / ends (DC): Shaking the body or part of it by small shocks. Succession of rhythmic involuntary movements in one part of the body or around it. Fear, fright.

17. Tremor voice / ends (DO): Can be measured by the interviewer: tremor voice absent (=0), present (=1); Tremor ends: absent (=0), present (=1).

18. Chest pain / abdominal (DC): Pain: A painful unpleasant feeling, caused injury or abnormal condition of the body or part of it. Physical or moral suffering, distress, hurt, Anguish, sorrow, suffering expression. Perception of pain located in the stomach, or leads ("ball" hitting the chest).

18. Chest pain / abdominal (DO): Chest pain may be reported by the patient, considering the location, type, intensity, duration and triggering factor. Can be measured as absent (=0) or present (=1). Abdominal pain may be reported by the patient, can be measured as absent (=0) or present (=1).

(Cognitive signs and symptoms) *

19. Verbalization of fear (concerns) (DC): the act or effect of verbalization. Making verbal, to explain something verbally, the object of fear, expressed concerns.

19. Verbalization of fear (expressed concerns) (DO): The patient may report that feeling during the interview. May be absent (=0) or present (=1).

*LEV IN, R. F.; MILER, B. K-. 1999.

Related factors: Anesthetic ( ) Surgery ( ) Hospitalization ( ) Disease ( ) Post-operative ( ) State of health threaten ( ), environment ( ) economic status ( ) Others ( ) (SURIANO, MLF; MICHEL, JLM; BARROS, ALBL, 2005).

Appendix 2
Definition, defining characteristics and related factors of Perioperative Anxiety Syndrome (Suriano, 2005)

Perioperative Anxiety Syndrome
Definition – Emotional state with psychological and physiological components, with feelings of apprehension defense, uncertainty, powerlessness, feeling awkward and uncomfortable, kind of vague and nonspecific, there may be feelings of isolation, alienation and insecurity.

Defining Characteristics
- Apprehension
- Nervousness
- Verbalization
- Increased Tension
- Excitement
- Restlessness
- Dry Mouth
- Fear of Death
- Anguish
- Tremor Voice
- Anxiety Verbal Report

Related factors
- Anesthetic
- Surgery
- Post-operative
- Hospitalization