

The Effect of Pre-Operative Distress on the Perioperative Period



Gul Cakir and Ayla Gursoy*

Department of Nursing, Karadeniz Technical University, Turkey

Submission: February 05, 2017; **Published:** April 21, 2017

***Corresponding author:** Ayla Gursoy PhD, RN, Department of Nursing, Faculty of Health Sciences, Karadeniz Technical University, 61080 Trabzon, Turkey, Email: aylagursoy68@gmail.com

Abstract

Distress is defined as feelings and ideas that lead to unpleasant problems in diseases and treatments. Distress has meanings such as sadness, hopelessness, weakness, fear, excitement, anxiety, panic, depression, indecision and burnout. Pre-operative patients undergo distress at different levels and different reasons.

The main cause of distress for surgery patients is fear. Death, fear that body will be damaged and pain will occur, loss of identity and control under anesthesia, mysteries about surgery and dependency in the post-operative period are the most common causes of fear. Pre-operative distress levels vary by diagnosis, type of surgery, organ or system involved and patients' prejudgments about these issues.

Distress effects the individual negatively in every sense leads to various complications during perioperative period negative effects. Patients suffer from such problems as pain, increased risk of infection, nausea and vomiting, delayed wound healing, longer hospital stays during the postoperative period due to pre-operative distress.

As a biopsychosocial being, the patient should be evaluated and supported in terms of preoperative distress to help them cope with pre-operative distress. This article deals with the effect of pre-operative distress on the post-operative period.

Keywords: Peri-operative; Surgery; Patients; Psychosocial support

Introduction

Distress is defined as feelings and ideas that lead to unpleasant problems in diseases and treatments. Distress has meanings such as sadness, hopelessness, weakness, fear, excitement, anxiety, panic, depression, indecision and burnout. The pre-operative period is a crisis period for many people. During this period individuals may experience many of the feelings, emotions and ideas that cause distress [1,2]. Fear is the most common cause of distress about surgery. Death, fear that body will be damaged, waking and suffering during surgery, pain, loss of identity and control under anesthesia and loss of organs and tissues are the most common causes of fear. Hospitalization and waiting for surgery, the meaning of the surgery for the patient and lack of knowledge about surgery also cause distress. Being unfamiliar with operating rooms, the idea that attention is not paid to privacy during surgery, post-operative pain and being dependent on others, life conditions being negatively affected, being away from family and friends, inability to provide care to dependents and fear of job loss are other causes of distress [3,4]. The stressful period that starts

with telling patients that they will be operated on can negatively affect their disease, care, compliance with treatment, treatment duration, treatment costs and quality of life [1].

Akbulut reported that patients had pre-operative anxiety due to causes such as lack of knowledge and experience of anesthesia, failure to wake up after anesthesia, absence of the anesthesiologist in the operating room, altered awareness under anesthesia, post-operative nausea and vomiting, attitudes of the anesthesiologist, staying in intensive care, long postoperative sleep, fear of injections and fear that medical personnel may cause problems [5].

As a result of pre-operative distress, many physiological and psychological changes occur in individuals. Due to the autonomic nervous system affected by distress, anxiety and fear, the sympathetic and parasympathetic nervous systems are affected, and adrenalin increases blood pressure by causing dilatation in the bronchus. Tachycardia, tachypnea, changes in body temperature, cold skin, sweating and dryness of the mouth

may occur. Gastrointestinal system functions and secretion reduce. Nervousness, trembling extremities, lack of appetite, speaking quickly, uneasiness, flushed skin, sweating palms, urinary incontinence and hypersensitivity may occur [6]. With the stimulation of autonomic nervous system, blood pressure, heart rate, respiration rate increase. Stomach and bowel movements increase. Saliva decreases, dry mouth occurs and blood glucose levels increase [2,6].

Reactions to distress may include the mobilization of energy stores used for sustaining life, hypermetabolism, activation of the cardiovascular system and increase in blood volume to vital organs. These reactions can be dangerous during surgery and anesthesia because they increase energy consumption and myocardial load [7].

Intraoperative excessive distress leads to hemodynamic changes and thus excessive use of anesthetics may be required during surgery, hypothermia and intraoperative bleeding [8]. The type of anesthetics administered to patients during surgery should not be ignored. The type and amount of the anesthesia and sedative drugs administered can change the mean arterial pressure, heart rate, arterial oxygen saturation, cortisol, insulin and blood glucose levels of patients who have undergone surgical distress. These changes can affect individuals negatively during the post-operative period. In the meantime, patients' recovery is prolonged, their pain threshold falls, and their need for analgesics increases.

Postoperative pain and associated physiological changes increase stress more and thus put patients in a vicious cycle [9,10]. These conditions increase infection risk, nausea and vomiting, immobilization and respiratory difficulty. Eating disorders caused by stress during preoperative period retard surgical recovery, too and thus hospital stay gets prolonged, quality of life deteriorates and various problems are experienced. Studies emphasize that stress augments mortality and morbidity risk in the post-operative period [1,9].

The psychological problems caused by surgical distress include inability to communicate, insomnia, inability to eat, dissatisfaction with activities, psychological tiredness, insensitivity to environment, burnout and feelings of inadequacy towards family members [11].

The psychological preparation of surgery patients is as important as physiological preparation. In the peri-operative period, all members of the surgical team should consider patients holistically when they assess their distress. Because the patient is afraid to know that he will have surgery, but he is also afraid that he does not know what to do and that he is strangers to the people around him. Patients feel fear not only because they know they will have surgery, but also because they do not know what will happen in the postoperative period and they are unfamiliar with people around them. In the pre-operative period, that anesthesiologists and nurses meet patients and introduce

them operating room may reduce their operative fears and distress and thus patients feel more secure in a safe and familiar environment in the future period and comfort themselves by sharing negative opinions and emotions with others easily [12]. Kiyohara et al. [13] reported that preoperative visits paid by anesthesiologists and patient training reduced patients' anxiety. Karayurt [14] reported that patients to whom routine preoperative patient training was provided by operating nurses had lower levels of anxiety. Similarly, a study by Sadati et al. [15] found that pre-operative nurse visits decreased pre-operative anxiety and post-operative complications.

It is highly important to provide patient training and psychological support to reduce surgical distress. Surgical team members should assess patients not only physiologically, but also psychologically and socially. All members of health care teams should keep in mind that pre-operative psychological preparation is as important as physiological preparation. Patient-centered and holistic care should be used so that surgeons, anesthesiologists and nurses can manage patients' distress. Patients should be allowed to express their opinions and emotions, and their fears should be understood. Correct, clear and sufficient clarifications should be given at the right time, and patients should be encouraged in all phases of their treatment. The team should not forget that results of a surgery that is technically the most successful will not be a success for a patient who is not ready and prepared.

References

1. Klopfenstein CE, Forster A, Gessel EV (2000) Anesthetic assessment in an outpatient consultation clinic reduces preoperative anxiety. *Can J Anaesth* 47(6): 511-515.
2. Karanci AN, Dirik G (2003) Predictors of pre and postoperative anxiety in emergency surgery patients. *J Psychosom Res* 55(4): 363-369.
3. Gessler S, Low J, Daniells E, Williams R, Brough V, et al. (2008) Screening for distress in cancer patients: Is the Distress Thermometer a valid measure in the UK and does it measure change over time? A prospective validation study. *Psychooncology* 17(9): 538-547.
4. Nigussie S, Belachew T, Wolancho W (2014) Predictors of preoperative anxiety among surgical patients in Jimma University Specialized Teaching Hospital South Western Ethiopia. *BMC Surgery* 14: 67-71.
5. Akbulut S (2011) Preoperatif anksiyete nedenleri ve preoperatif vizitin anksiyete üzerine etkisi. *Uzmanlık Tezi. Dicle Üniversitesi Tıp Fakültesi Anesteziyoloji ve Reanimasyon Anabilim Dalı, Diyarbakır*.
6. Rosen S, Svensson M, Nilsson U (2008) Calm or not calm the question of anxiety in the perianesthesia patient. *J Perianesth Nurs* 23(4): 237-246.
7. Acar D, Erkalıç EK, Gümüş T, Şahin D, Dinçel AS, et al. (2015) Inguinal herni cerrahisinde farklı anestezi tekniklerinin cerrahi stres yanıt üzerine etkisi. *Turkish Journal of Anesthesia & Reanimation* 43(2): 91-99.
8. Kaval E (2015) Koroner arter bypass greftleme cerrahisinde bispektral indeks monitörizasyonunun intraoperatif anestezik ve analjezik gereksinimi ile postoperatif sonuçlara etkisi, *Uzmanlık Tezi. Başkent Üniversitesi Tıp Fakültesi Anesteziyoloji Anabilim Dalı, Ankara*.
9. Williams JB, Alexander KP, Morin JF, Langlois Y, Noiseux N, et al. (2013) Preoperative anxiety as a predictor of mortality and major morbidity

- in patients aged >70 years undergoing cardiac surgery. *Am J Cardiol* 111(1): 137-142.
10. De Cosmo G, Congedo E, Lai C, Primieri P, Dottarelli A, et al. (2008) Preoperative psychological and demographic predictors of pain perception and tramadol consumption using intravenous patient-controlled analgesia. *Clin J Pain* 24(5): 399-405.
11. Ilgöz M (2014) Stres kaynakları, sonuçları ve stresle mücadele. Yüksek Lisans Tezi, Beykent Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul.
12. Gürsoy A, Candaş B, Güner Ş, Yılmaz S (2016) Preoperative stress: An operating room nurse intervention assessment. *J Perianesth Nurs* 31(6): 495-503.
13. Kiyohara LY, Kayano LK, Oliveira LM, Yamamoto UM, Inagaki MM, et al. (2004) Surgery information reduces anxiety in the preoperative period. *Rev Hosp Clin Fac Med Sao Paulo* 59(2): 51-56.
14. Karayurt Ö (1998) Ameliyat öncesi uygulanan farklı eğitim programlarının hastaların anksiyete ve ağrı düzeylerine etkisinin incelenmesi. *Hemsirelik Yüksekokul Dergisi* 2: 20-26.
15. Sadati L, Pazouki A, Mehdizadeh A, Shoar S, Tamannaie Z, et al. (2013) Effect of preoperative nursing visit on preoperative anxiety and postoperative complications in candidates for laparoscopic cholecystectomy: A randomized clinical trial. *Scand J Caring Sci* 27(4): 994-998.



This work is licensed under Creative Commons Attribution 4.0 License
DOI: [10.19080/JAICM.2017.02.555578](https://doi.org/10.19080/JAICM.2017.02.555578)

**Your next submission with Juniper Publishers
will reach you the below assets**

- Quality Editorial service
- Swift Peer Review
- Reprints availability
- E-prints Service
- Manuscript Podcast for convenient understanding
- Global attainment for your research
- Manuscript accessibility in different formats
(Pdf, E-pub, Full Text, Audio)
- Unceasing customer service

Track the below URL for one-step submission
<https://juniperpublishers.com/online-submission.php>