

# The Nursing Counselling among Patients Undergoing Mutilating Surgery: An Experimental Study

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ISSN: 2577-2007



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Submission: 📅 February 17, 2020

Published: 📅 February 26, 2020

Volume 6 - Issue 1

**How to cite this article:** Carlo De Werra, Francesco Mangani, Antonio Gargiulo, Roberto Ponzo, Ermelinda Gnarra, et al. The Nursing Counselling among Patients Undergoing Mutilating Surgery: An Experimental Study. COJ Nurse Healthcare.6(1). COJNH.000628.2020. DOI: [10.31031/COJNH.2020.06.000628](https://doi.org/10.31031/COJNH.2020.06.000628).

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## Abstract

**Background:** Counselling is the psychological aspect and an adequate and sympathetic communication with the patient. It consists in making more comprehensible to the patient his situation and to facilitate him to manage it with the greatest possible autonomy.

**Purpose:** The purpose of our study was to evaluate the effect of the pre-operative nursing counselling in anxiety management, particularly among patients undergoing mutilating surgery.

**Methods:** We selected 80 patients, 43 males and 37 females, who were scheduled for either a radical colorectal or breast cancer surgery. We used a two groups comparative design with an intervention group and a control group. STAI-Y1 test was administered to both groups. We used it to evaluate the pre- and post-operative anxiety and to evaluate the effect of the counseling intervention.

**Result:** We calculated the preoperative and postoperative STAI-Y1 test average score for each group. There was a reduction of postoperative average score compared to preoperative one in both groups. In the intervention group, that received nursing counselling, the reduction of the postoperative average score is greater than in the control group.

**Conclusion:** The analysis of our data shows that nursing counselling has a very important role to reduce anxiety in the surgical patient. We hope that counselling will be a teaching subject during the nursing degree curriculum. Further studies are needed to confirm our data.

**Keywords:** Counselling; Anxiety; Nursing; Surgery

## Introduction

Counselling is not new for the modern nurse but has ancient origins. It is the psychological aspect and an adequate and sympathetic communication with the patient. Humanistic psychology defines "Counselling" as a professional helping relationship, focused on the patient. The help consists in making more comprehensible to the patient his situation and to facilitate him to manage it with the greatest possible autonomy. We can define it as an interactive learning system that gives the patient the skills for problem management. Every healthcare provider may use interview techniques, but it can be defined "nursing counselling" if nurses learn specific skills and learn to adopt a way to conduct the interview. It is necessary that the nurses consider the knowledge that is needed to be able to pass this knowledge on to the patient, thus, defining his/her skills and activating the responses in the most appropriate time and way. Nursing counselling may provide an introduction of yourself to the patient and his/her family as an operator able to clarify, stimulate, facilitate, encourage, provide information of the disease [1]; and these skills are not necessarily provided in the basic training [2].

Counselling has three steps: Understanding, exploration and management of the problem. The first phase is the time of reception and the first contact with the patient. The goal is to understand what the problem is. It is the clarification stage. At this stage the patient is "confused" not neurologically but subjectively. The emotional value of the problem is, for the patient, stronger and bigger than the cognitive and rational value. The task of the nurse is to encourage as much as possible to the patient in the expression of his problem, in order to allow him/her to talk and bring order to the multiplicity of data and emotions. In this first part it is useful and important to know how to listen without interfering, to understand without

drawing conclusions and without giving personal considerations. The second step allows to redefine and clarify the issue. In the pre-operative part, it's not clear to the patient what he mostly fears and what is for him the real problem; in the case of a mutilating surgery the main problems for the patients are the inevitable alteration of their physical appearance [3] and its real impact on his quality of life. Another important aspect is the fear linked to anesthesia, to complications related to the surgical operation, e.g. infections [4-6], to complications in laparoscopic surgery [7,8], and to the risks of the surgery in the advanced aged patient [9]. This phase represents the moment of awareness of what is the problem. The third phase's aim is the activation of the patient's internal and external resources; therefore, it's the time of the issue management by the patient. In this phase, the goal of the nurse counsellor is to put the patient on the spot to take charge of the problem and to encourage him to find strategies to solve it.

For each of the three phases there are technical and communication skills, accentuated to help the patient to open up and trust. The nurse counselor skills do not come in the patient's

psyche, in remote and unconscious dynamics; he stays with the patient and/or his family during his presence in the hospital and he/she participates in their history, without trying to change, and using skills, abilities and knowledges to resolve, as far as possible, the identified problem [10]. The purpose of our study was to evaluate the effect of the pre-operative nursing counselling in anxiety management.

### Materials and Methods

We selected 80 patients, 43 males and 37 females, who were scheduled for either a radical colorectal or breast cancer surgery. Patients were 30-70 years old with a heterogeneous social-cultural status. We excluded from the sample of the study patients, those who had recently taken psychoactive drugs and patients with existing or past psychiatric disease. We used a two-group comparative design with an intervention group and a control group. Of 80 patients, 40 were placed in the intervention group who have received the nursing counselling (Group B), and the remaining 40 were placed in the control group (Group A). The characteristics of the two groups are shown in Table 1.

**Table 1:** Characteristics of the two groups based on age, sex and educational status.

Characteristics	Group A	%	Group B	%
	(Control Group)		(Intervention Group)	
<b>Age</b>				
30-45	9	22.5	11	27.5
46-60	12	30	8	20
>60	19	47.5	21	52.5
<b>Total</b>	<b>40</b>	<b>100</b>	<b>40</b>	<b>100</b>
<b>Sex</b>				
Male	23	57.5	20	50
Female	17	42.5	20	50
<b>Total</b>	<b>40</b>	<b>100</b>	<b>40</b>	<b>100</b>
<b>Education Status</b>				
Primary school	5	12.5	4	10
Middle school	7	17.5	9	22.5
High school	25	62.5	22	55
University	3	7.5	5	12.5
<b>Total</b>	<b>40</b>	<b>100</b>	<b>40</b>	<b>100</b>

1=Not at all; 2= Somewhat; 3=moderately; 4=very much so. The STAI-Y1 test consists of 20 items. The total score is between 20 and 80; the threshold value of anxious symptoms is set at 40. According to score is possible to define the severity level of anxiety: 40 to 50 mild, 50 to 60 moderate, > 60 serious.

We informed all patients about the study and they expressed a verbal agreement to take part in this study.

STAI-Y1 test, that was developed by Spielberger et al. [11] in 1970 in the US, which was administered to both groups. STAI-Y1 test is shown in the Table 2. We used it to evaluate the pre- and post-operative anxiety. Patients filled out test after their arrival to the hospital. All patients filled out the questionnaire in about ten

minutes. Then the patients in group B received an adequate nursing counselling by experienced staff. These patients received nursing counselling in the relax area of the operating room and then during the first day after operation. The nurse during the counselling gave to the patient's moral support and information about the operation and the post-operative course. 24/48h after the operation the same STAI-Y1 test was administered again to patients of both groups.

**Table 2:** STAI-Y1 test.

Statements	Not at all	Some-what	Moderately	Very much so
I feel calm	1	2	3	4
I feel secure	1	2	3	4
I'm tense	1	2	3	4
I feel strained	1	2	3	4
I feel tranquil	1	2	3	4
I feel upset	1	2	3	4
I'm presently worrying over possible misfortunes	1	2	3	4
I feel satisfied	1	2	3	4
I feel frightened	1	2	3	4
I feel comfortable	1	2	3	4
I feel self-confident	1	2	3	4
I feel nervous	1	2	3	4
I'm jittery	1	2	3	4
I feel indecisive	1	2	3	4
I'm relaxed	1	2	3	4
I feel content	1	2	3	4
I'm worried	1	2	3	4
I feel confused	1	2	3	4
I feel steady	1	2	3	4
I feel pleasant	1	2	3	4

## Result

**Table 3:** STAI-Y1 test score obtained by each patient and average score of the two groups.

Group A (Control group) Pre-Operative	Score	Group B (Intervention group) Pre-Operative	Score	Group A (Control group) Post-Operative	Score	Group B (Intervention group) Post-Operative	Score
Pz.1A	58	Pz.1B	58	Pz.1A	50	Pz.1B	50
Pz.2A	67	Pz.2B	62	Pz.2A	65	Pz.2B	47
Pz.3A	49	Pz.3B	47	Pz.3A	42	Pz.3B	43
Pz.4A	57	Pz.4B	48	Pz.4A	52	Pz.4B	41
Pz.5A	60	Pz.5B	50	Pz.5A	51	Pz.5B	42
Pz.6A	58	Pz.6B	61	Pz.6A	55	Pz.6B	54
Pz.7A	64	Pz.7B	59	Pz.7A	60	Pz.7B	52
Pz.8A	55	Pz.8B	49	Pz.8A	45	Pz.8B	40
Pz.9A	61	Pz.9B	64	Pz.9A	56	Pz.9B	52
Pz.10A	55	Pz.10B	45	Pz.10A	50	Pz.10B	43
Pz.11A	45	Pz.11B	52	Pz.11A	41	Pz.11B	45
Pz.12A	48	Pz.12B	69	Pz.12A	40	Pz.12B	55
Pz.13A	66	Pz.13B	57	Pz.13A	47	Pz.13B	43
Pz.14A	59	Pz.14B	65	Pz.14A	59	Pz.14B	52
Pz.15A	51	Pz.15B	55	Pz.15A	51	Pz.15B	45
Pz.16A	71	Pz.16B	48	Pz.16A	60	Pz.16B	40
Pz.17A	61	Pz.17B	66	Pz.17A	56	Pz.17B	51

Pz.18A	57	Pz.18B	70	Pz.18A	51	Pz.18B	52
Pz.19A	52	Pz.19B	57	Pz.19A	50	Pz.19B	42
Pz.20A	58	Pz.20B	44	Pz.20A	53	Pz.20B	38
Pz.21A	49	Pz.21B	71	Pz.21A	48	Pz.21B	58
Pz.22A	55	Pz.22B	52	Pz.22A	54	Pz.22B	42
Pz.23A	59	Pz.23B	65	Pz.23A	52	Pz.23B	50
Pz.24A	47	Pz.24B	69	Pz.24A	45	Pz.24B	51
Pz.25A	61	Pz.25B	46	Pz.25A	57	Pz.25B	36
Pz.26A	66	Pz.26B	49	Pz.26A	61	Pz.26B	36
Pz.27A	59	Pz.27B	50	Pz.27A	55	Pz.27B	41
Pz.28A	52	Pz.28B	62	Pz.28A	47	Pz.28B	52
Pz.29A	62	Pz.29B	63	Pz.29A	52	Pz.29B	49
Pz.30A	57	Pz.30B	61	Pz.30A	55	Pz.30B	53
Pz.31A	61	Pz.31B	70	Pz.31A	55	Pz.31B	51
Pz.32A	57	Pz.32B	57	Pz.32A	54	Pz.32B	44
Pz.33A	62	Pz.33B	56	Pz.33A	54	Pz.33B	43
Pz.34A	55	Pz.34B	49	Pz.34A	53	Pz.34B	35
Pz.35A	61	Pz.35B	51	Pz.35A	54	Pz.35B	42
Pz.36A	62	Pz.36B	62	Pz.36A	58	Pz.36B	54
Pz.37A	69	Pz.37B	57	Pz.37A	61	Pz.37B	43
Pz.38A	55	Pz.38B	55	Pz.38A	50	Pz.38B	44
Pz.39A	65	Pz.39B	57	Pz.39A	59	Pz.39B	39
Pz.40A	57	Pz.40B	72	Pz.40A	53	Pz.40B	51
<b>Average Score</b>	58.075	<b>Average Score</b>	57.5	<b>Average Score</b>	52.775	<b>Average Score</b>	46.025
<b>S.D.</b>	±6,0	<b>S.D.</b>	±8,0	<b>S.D.</b>	±5,6	<b>S.D.</b>	±5,9

Table 3 shows the scores on the STAI-Y1 test obtained by patients. We calculated the preoperative and postoperative average score for each group. The preoperative average scores of the two groups were roughly equivalent: 58.07 for the control group and 57.5 for the intervention group. Psychologists interpret these STAI test values as a state of moderate anxiety. The postoperative average scores of the two groups were quite different: 52.7 for the control group; 46.02 for the intervention group. There was a reduction of postoperative average score compared to preoperative average score in both groups. This reduction in both groups depends on the fact that surgery is finished, and they are out of the operating theatre. In the intervention group, that received nursing counselling, the reduction of the postoperative average score is greater than in the control group. The postoperative average score of the intervention group, according to the interpretation of STAI test, indicates a slight level of anxiety; the level of anxiety in the control group remained around moderate values.

## Discussion

Between 1943 and 1954 the American psychologist Abraham Maslow conceived the concept of "Hierarchy of Needs", which identified the physical and psychological safety in the patient as a basic need immediately after the patient's physiological needs.

In 1952, Papeleu with his "Interpersonal Relation in Nursing" emphasizes the relationship between nurse and patient, which is, in her opinion, the basis of nursing practice. The Theory of Dorothea Orem focuses on the patient's self-care needs. Therefore, Orem can be considered a pioneer of nursing counselling. She says that nurse's aim is to increase the patient's ability to meet his own needs independently. The Leininger's theory is based on cultural diversity and the universality. Its aim is to provide nursing to patients based on their culture. Sister Calista Roy identifies the patient as an adaptive system; according to her model, the nursing goal is to help people to adapt themselves to change and to help each individual with their psychological needs [12]. A lot of emotional problems, such as anxiety, loss of control, fear, uncertainty, decrease of self-esteem, can be experienced by surgical patients, especially for mutilating surgery, e.g. rectal cancer surgery [13-15]. A lot of trials show that the proper preparation for the surgical patient has shown success in decreasing aversive reactions; but patients, in most hospitals, don't receive an adequate education and counselling [16,17]. Preoperative information given to patients improves their postoperative course. Several authors have shown that when patients are well informed, they feel less anxiety and they are more mobilized. The patients want to receive information and they show greater satisfaction with the care received [18-22].

Anxiety represents an additional risk for the patient's health: it may interfere with his ability to learn and adapt; it may inhibit the immune and pharmacological response; it may lead to an increase in distress and post-operative pain [23]. Preoperative anxiety can affect the early prognosis, hospitalization time [24] and the consumption of postoperative analgesics [25]. Some studies have shown that an excessive state of anxiety in the patient has a negative influence for the patient's health because it causes an increased consumption of proteins by the body, a prolongation of the time of healing of surgical wounds, a potential increase in the infection risks and finally a hydro electrolytic imbalance. All these factors can affect the postoperative hospital stay, they involve more pain for the patient and a higher cost for the hospital. There are several good reasons to practice pre-operative counselling [26]. There isn't a significant correlation with the social criteria (gender, age, working conditions, education, lifestyle) and clinical criteria (diagnosis, comorbidities, type of intervention) [27]. The anxiety condition is quantified through an appropriate rating scales, including the STAI-Y test. The intervention that is more effective to reduce anxiety is counselling. Since 1975, some authors [28] observed the close relationship between the information received by the patient and his state of anxiety: they are inversely proportional.

## Conclusion

Counselling is very important in the nursing of surgical patients [29]. Counselling helps patients to have an active part in their post-operative care. Effective pre-operative information helps to reduce stress, anxiety [30] and pain levels, leading to better post-operative outcomes [31-33]. The analysis of our data shows that nursing counselling has a very important role to reduce anxiety in the surgical patient. We hope that it may be used for all surgical patients, especially for patients undergoing mutilating surgery and it will be a teaching subject during the three years of the nursing degree's curriculum. Further studies are needed to confirm our data.

## References

- Raju B, Reddy K (2017) Are counseling services necessary for the surgical patients and their family members during hospitalization? *Journal of Neurosciences in Rural Practice* 8(1): 114-117.
- Danon DM (2014) *Counseling: The relationship that promotes personal growth*. Red Edizioni, Milano, Italy.
- De Werra C, Tramontano R, Di Filippo G, Aloia S, Di Micco R, et al. (2016) Giant lipoma in the thigh a case report. *Ann Ital Chir* 87:
- De Werra C, Aloia S, Di Micco R, Del Giudice RD, Tramontano R, et al. (2015) SSIs in Italy: Prevention and surveillance during the last five years. *Surgical Science* 6(8): 383-394.
- Sartelli MS, Catena FC, Ansaloni LA, Lazzareschi DV, Taviloglu K, et al. (2011) Complicated intra-abdominal infections observational European study (CIAO study). *World J Emerg Surg* 6(1): 40.
- De Werra C, Del Giudice RD, Di Micco R, Aloia S, Bracciano L, et al. (2013) Biliary duct injuries in the laparoscopic era: Our experience. *G Chir* 34(3): 59-63.
- De Werra C, Di Micco R, Pilone V, Formato A, Montella E, et al. (2013) Serum *in vivo* and *in vitro* activity of single dose of ertapenem in surgical obese patients for prevention of SSIs. *Obes Surg* 23(7): 911-919.
- Riccio PR, De Werra C (2012) *Nursing e laparoscopia: Compendio per la professione infermieristica*. Forma Communications, Naples, Italy.
- Limite G, Di Micco R, Sollazzo V, Esposito E, Cervotti M, et al. (2014) Clinically cN0 breast cancer in elderly: What surgery? *International Journal of Surgery* 12(2): 130-134.
- Artioli GA, Montanari RM, Saffiotti AS (2004) *Counseling e professione infermieristica: Teoria, tecnica, casi*. Roma: Carocci Faber, Italy.
- Spielberger CDS, Gorsuch RLG, Lushene REL (1970) *State-trait anxiety inventory*. Consulting Psychologist Press, Palo Alto, California, USA.
- Manara D (2000) *Verso una teoria dei bisogni dell'assistenza infermieristica*. Lauri, Milano, Italy.
- Luglio G, Sivero L, Tarquini R, D'Antonio D, Quarto G, et al. (2013) Functional results after TME for rectal cancer: J-Pouch vs colectomy. A single institution prospective study. *Chirurgia* 26(4): 283-286.
- Luglio G, Tarquini R, Sivero L, Giglio MC, De Werra C, et al. (2013) Functional and oncological outcomes after transanal local excision for rectal cancer. A prospective study. *Chirurgia* 26(5): 337-340.
- Palumbo R, Del Giudice R, Cervotti M, De Filippo D, Costanzo A, et al. (2013) Escissione locale del cancro del retto sottoperitoneale dopo chemio radio terapia neoadiuvante: Valutazione della sicurezza e dell'efficacia. *Antologia Italiana*.
- Asilioglu KA, Celik SSC (2004) The effect of preoperative education on anxiety of open cardiac surgery patients. *Patient education and counseling* 53(1): 65-70.
- Breemhaar BB, Borne HWB, Mullen PD (1996) Inadequacies of surgical patient education. *Patient education and counseling* 28(1): 31-44.
- Nelson S (1996) Pre-admission education for patients undergoing cardiac surgery. *Br J Nurs* 5(6): 335-340.
- Garbee DDG, Gentry AJG (2001) Coping with the stress of surgery. *AORN journal* 73(5): 946-951.
- Hathaway DH (1986) Effect of preoperative instruction on postoperative outcomes: A meta-analysis. *Nurs Res* 35(5): 269-275.
- Watts S, Brooks A (1997) Patients' perceptions of the preoperative information they need about events they may experience in the intensive care unit. *Journal of Advanced Nursing* 26(1): 85-92.
- De Wit P, Duivenvoorden HJ, Dixhoorn JJ (1996) More psychological preparation in heart surgery for certain patients is beneficial. *Nederlands tijdschrift voor geneeskunde* 140(34): 1720-1723.
- Wiens AGW (1998) Preoperative anxiety in women. *AORN journal* 68(1): 74-88.
- Akbari M, Celik SS (2018) The effects of discharge training and post discharge counseling on quality of life after coronary artery bypass graft surgery. *Nursing and Midwifery Studies* 7(3): 105-110.
- Zhang Y, Li Z, Chen J, Fan Z (2019) Effect of preoperative anxiety on early prognosis of patients after thoracoscopic lung cancer resection. *Zhongguo Fei Ai Za Zhi* 22(11): 714-718.
- Boore JB (1987) *Nursing the physically III adult*. Churchill Livingstone, London, UK.
- Maward LM, Azar NA (2004) Comparative study of anxiety in informed and non-informed patients in the preoperative period. *Rech Soins Infirm* 78: 35-58.

28. Holmes JH (2005) Preoperative visiting: Landmarks of the journey. *British journal of perioperative nursing* 15(10): 434-440.
29. Nelson G, Bakkum-Gamez J, Kalogera E, Glaser G, Altman A, et al. (2019) Guidelines for perioperative care in gynecologic/oncology: Enhanced Recovery After Surgery (ERAS) Society recommendations-2019 update. *International Journal Gynecological Cancer* 29(4): 651-668.
30. Lemos-Neto SV, Barrucand L, Verçosa N, Tibirica E, Lemos MF (2019) Preoperative education reduces preoperative anxiety in cancer patients undergoing surgery: Usefulness of the self-reported Beck anxiety inventory. *Revista Brasileira de Anestesiologia* 69(1): 1-6.
31. Healy KM (1968) Does preoperative instruction make a difference? *The American journal of nursing* 68(1): 62-67.
32. Heather MA, Charlotte D, Mckelvie R, Hirsh J, Rush BR (2000) Effect of a preoperative intervention on preoperative and postoperative outcomes in low-risk patients awaiting elective coronary artery bypass graft surgery. A randomized, controlled trial. *Annals of internal medicine* 133(4): 253-262.
33. Van Aernam B, Lindeman CA (1971) Nursing intervention with the presurgical patient: The effects of structured and unstructured preoperative teaching. *Nursing research* 20(4): 319-332.

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