

# MANAGEMENT OF ANXIETY AND DEPRESSION TREATMENT OF PRE-SURGERY PATIENTS AT Dr. SOEBANDI REGIONAL PUBLIC HOSPITAL JEMBER

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**Abstract:** Management of anxiety and depression treatment that can help the process of a patient while undergoing surgery. This study aims to determine the management treatment of the pre-surgery patient that is through psycho-education to be psychologically prepared for surgery. The study was conducted in patients who will have surgery in Dr. Soebandi Hospital Jember. The sample in this study was 50 people with different levels of education and data analysis using SPSS 20. Based on the results of calculations of the Anova test, it was known that the F count 0.322 > than F table 0.318 with a significance value > 0.05. The result of that calculation showed that there is no significant effect between the management of pre-surgery patients' treatment with the level of depression and anxiety. The result of correlation test showed that depression had a positive relationship with the level of knowledge which means that patients with higher levels of education have depression when they have surgery, but anxiety has a negative correlation value which means that the higher the education level, the lower the anxiety level.

**Keyword:** depression, anxiety, management.



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Management in an organization is an important instrument that determines the success or failure of an organization in achieving its objectives. Good organizational management will have an impact on the development of the organization for the better. According to Olum (2004), management is one of the most important human activities. From the time humans began to form social organizations to achieve their goals and objectives that cannot be achieved as individu-

als, management activities are important to ensure coordination between individuals.

Management in the world of health in general and hospital management is very important because it relates to the soul and health of patients. One of the hospital management is the management of handling stress and depression in patients who will undergo surgery. Patients who will have surgery, both small and large, may suffer to psychological disorders. Psychological disorders that can be experienced are anxiety and depression, which are caused by feelings of how the process of surgery to be undergone and also their condition after having surgery. The application of good management to stress and depression is expected to help smooth the surgery that will be carried out.

Based on the results of a study conducted by Varga (2010) in Komolafe and Csernus (2015), it was shown that faster recovery could be achieved by implementing good communication and methods to reduce anxiety, which resulted in reduced pain sensation, improved patient compliance, reduced complications, decreased demand for medication, duration of treatment shorter stays and, therefore, health care can be more economical. Research conducted by Kocsisne (2003) in Komolafe and Csernus (2015), showed pre-surgery preparation when conscious patients performed by nurses significantly reduced the sensation of the anxiety of patients.

The level of anxiety which is experienced by people is varied, and it depends on: the internal factors (confidence, the level of knowledge of patients (it is influenced by education level). External factors: family support. The incidence of depressive disorders: in the primary care 10%, hospitalized 15%, the average age is 40, 50% of the age of onset is between the ages of 20-50. Gender also has an effect on depressive disorders, where women are two times more likely than men; it is believed to be related to hormones, psychosocial stressors and the behavioral models about powerlessness which is studied (Sadock and Sadock, 2009).

Anxiety, depression, and stress are emotional conditions that can be experienced by patients undergoing surgery (Marcolino, et al., 2007). Psychological conditions can be influenced by several factors, such as changes of family and social roles, uncertainty of prognosis, loss of freedom, the anxiety about the surgery procedure, and disability, thus adaptation to the new conditions is necessary (Dos Santos, et al., 2014).

Anxiety and depression in pre-surgery patients when that did not get good handling can disrupt the process of surgery. Anxiety and depression in some cases may cause increase the blood pressure, which can lead to postponement of surgery because must wait for the patient's blood pressure returned to normal.

According to Matthias (2012) in Komolafe and Csernus, (2015), state that a number of studies have emphasized the importance of monitoring anxiety and this has been verified by various testing meth-

ods in its relationship to being able to show anxiety levels (such as State Trait Anxiety Inventory, Hospital Anxiety and Depression Scale, Visual Analogue Scale, Amsterdam Preoperative Anxiety Information Scale, Multiple Affect Adjective Check List). Other methods, including plasma cortical level analysis, urine catecholamine tests, checking blood pressure or pulse, are also used to assess anxiety levels.

Increased anxiety has important clinical implications because it has been shown to have a detrimental impact when anesthesia, post-surgery pain, and post-surgery recovery are required (Allen, et al., 2002).

The study of management of anxiety and depression treatment of pre-surgery patients at Dr. Soebandi Regiona Public Hospital Jember aims to determine the effectiveness of management treatment for depression and anxiety pre-surgery patients so that the clinician can find solutions with the hope of the pre-surgery patient's psychological condition ready for facing surgery.

### **Surgery**

According to Potter and Perry (2005), based on the function/purpose, surgery is divided into several, namely: 1) Diagnostic: biopsy, exploratory laparotomy; 2) Curative (ablative): tumor, appendectomy; 3) Reparative: multiple wound repair; 4) Reconstructive: mammoplasty, facial improvement; 5) Palliative: pain relief; 6) Transplantation: planting organs to replace organ/body structure which has malfunctions (kidney transplantation, cornea transplantation).

Based on the level of urgency, surgery is divided into 1) Emergency: immediate attention, the disorder can be life-threatening, cannot be delayed; 2) Urgent: it needs immediate attention, within 24 - 30 hours; 3) Required: it must be planned a few weeks/months; 4) Elective: it must be operated when needed, not too dangerous if it is not done; 5) Options: The decision depends on the patient's personal choice (Potter and Perry, 2005).

A surgery based on the size of the surgery which is performed is divided into two, namely: 1) Major: Surgery which involves organs broadly and has a high level of risk to the survival of the client;

2) Minor: Surgery on a small portion of body that has a smaller risk of complications compared with major surgery (Potter and Perry, 2005).

### Depression

Depression according to PPDGJ III (2009), is a disorder that lasts for at least two weeks with three main symptoms, which are: the Depressive atmosphere of feelings; Loss of interest and excitement; Reduced the energy in the form of fatigue and reduced activity. Usually, fatigue can be seen obviously after just a little activity.

The cutoff point used to determine the level of depression based on the Montgomery-Asberg Depression Scale (MADRS) is:

- 0 to 6 – normal/symptom absent
- 7 to 19 – mild depression
- 20 to 34 – moderate depression
- >34 – severe depression

### Anxiety

Anxiety can be regarded as an emotional response to a threat or danger. The inpatient in the hospital provides much of the threat to the most patients as it is related to the experience of new stress, psychological effects which may be amplified by poor health. However, surgeries in hospitals or other invasive procedures are recognized as factors that cause anxiety because it is accompanied by a variety of additional anxiety, including changes in the body image, possession of anesthetics, post-surgery pain and dependence (Allen, et al., 2002).

Anxiety is a condition which is oriented toward the future related to the preparations for the possibility, and negative events to come (Craske, et al., 2009).

Anxiety increased have important clinical implications because has proven have a detrimental impact on the time required anesthesia, the pain and recovery after surgery (Allen, et al., 2002).

### Management of Anxiety and Depression Treatment

According to Terry (2010), management is a process or framework, which involves the guidance or direction of a group of people towards organizational goals or intentions which are real. Manage-

ment is also a science and an art. Art is knowledge of how to achieve the desired results, or in other words, art is a skill which is gained from experience, observation, and learning, and also the ability to use management knowledge.

Management of anxiety and depression treatment is a part of the overall management of the hospital. Management of anxiety and depression treatment aims to help patients understand how the process of surgery and help patients relieve the anxiety and depression that can be experienced by patients who will undergo surgery.

Dos Santos, et al. (2014), stated that the pre-surgery period implies an emotional burden such as stress, anxiety, and major depression in patients and a significant effect on the patient, it means that, the psychological pre-surgery is very important and can be initiated by contact between the nurse/patient to do even before surgery.

According to Alligood and Tomey in Rahmawati, et al. (2014), comfort has become the main purpose of nursing, because by feeling comfortable, patients can be recovered. Gruendemann and Fernsebner in Rahmawati, et al. (2014), mention that physical comfort (the functional status of the body) must be ensured within normal limits as a condition of surgery.

Some actions can be done to lessen the emotional burden of the patients, which are: creating a training program for nurses to develop skills related to the management of stress, anxiety and depression treatment; providing pre-surgery consultation with the multi-professional team, where the emotional condition of anxiety, depression, and stress can be conceptualized through the attitudes, behaviors, and words aimed at autonomous and interdependent interventions to target the problem; and intervening interdependently so as to reduce the length of patients stay in hospital (Dos Santos, et al., 2014).

### METHOD

This study uses qualitative descriptive analysis, that is the method of analysis to explain the phenomenon investigated by statistical tools, so the primary data that are qualitative be quantified to meet the requirements of statistical tools.

The focus of this research is to look at the management of anxiety and depression treatment in the form of psycho-education in pre-surgery patients at dr. Soebandi Regional Hospital Jember, East Java. The anxiety level of patients was measured by using the Hamilton Anxiety Rating Scale (HAM-A), whereas depression was measured using the Montgomery-Asberg Depression Scale (MADRS).

The sampling method in this research was using purposive sampling technique. According to Hadi (2004), the sampling which is done by using purposive sampling is the selection of a group of subjects based on the characteristics or specific traits which are seen to have a close relationship with the characteristics or properties of the population that are already known in advance.

The statistical analysis in this study used the chi-square test. Chi-square test is very useful in conducting the statistical analysis if it does not have the information about the population or if the assumption required for the use of parametric statistics is not fulfilled.

In addition, the chi-square test aims to determine the relationship between management and the treatment of anxiety and depression with the levels of anxiety and depression in pre-surgery patients.

**Research Finding**

Based on the results of calculations of the Anova test, it was known that the F count 0.322 > than F table 0.318 with a significance value > 0.05. The result of that calculation showed that there is no significant effect between the management of pre-surgery patients' treatment with the level of depression and anxiety.

The result of correlation test based on the education level of patients showed that depression had a positive relationship with the value of 0.093, which means that patients with higher levels of education have depression, but anxiety has a negative correlation value which means that the higher the education level, the lower the anxiety level.

**Table 1 Overview of the Depression Education Level**

		Depression		Total
		Depression	No Depression	
Education	Primary school- Junior high school- Senior High school or equivalent	40	6	46
	College	3	1	4
	<b>Total</b>	<b>43</b>	<b>7</b>	<b>50</b>

The descriptive analysis of depression and anxiety in patients who will undergo surgery on the level of education showed that from 46 patients whose level of education ranged from elementary school – junior high school - and senior high school and equiva-

lent, 40 people were suffering from depression and 6 people were not suffering from depression, while from 4 people with bachelor degree, 3 people were suffering from depression and one person was not suffering from depression.

**Table 2 Overview of the Anxiety Education Level**

		Anxiety		Total
		Anxiety	No Anxiety	
Education	Primary school- Junior high school- Senior High school or equivalent	17	29	46
	College	2	2	4
	<b>Total</b>	<b>19</b>	<b>31</b>	<b>50</b>

Descriptive analysis of anxiety which has done showed that from the 46 people whose level of education ranged from elementary school – junior high school - and senior high school, 17 people experienced anxiety and 29 people were not anxious with the surgeries that would be undertaken, whereas, in patients with bachelor degree, two people experience anxiety while the other 2 did not feel anxious.

## DISCUSSION

The results showed that the management of anxiety and depression treatment had no significant effect on the level of depression and anxiety experienced by pre-surgery patients. Based on the results of calculations of the Anova test, it was known that the F count 0.322 > than F table 0.318 with a significance value > 0.05.

According to Shulman, et al. (1997), the pre-surgery education given to the patient does not affect the results of Coronary Artery Bypass Surgery (CABG), in addition, this study also reported that the pre-surgery education led the patient to stay in the hospital longer. This study did not prove that the pre-surgery education does not give a positive effect, but it has been analyzed that the education given before going in for surgery does not affect anxiety and depression (Isher, 2010). A significant level of depression statistically is found in pre-surgery patients in accordance with the level of educational qualification and length of staying in the hospital (Dos Santos, et al., 2014).

According to the research of Dos Santos, et al. (2014), after testing various hypotheses based on the different socio-demographic variables, the results showed that there was no significant difference statistically in the levels of anxiety, depression, and stress in a pre-surgery surgical patient according to gender, age, marital status, and profession. These results are also consistent with the results of a research done by Marcolino, et al. (2017), which aimed to understand the effects of social demographic variables of gender, age, marital status and education about anxiety and depression, concluded that there was no significant difference in the level of depression and anxiety (Dos Santos, et al., 2014).

Komolafe and Csernus (2015), stated that feelings of patient anxiety did not correlate with factors of marital status, religiosity and whether patients had had previous surgery. This phenomenon can be explained by several factors. Patients who have families may be more anxious than family members, who live at home; because it can create fear in the patient about who will take care of his family members or how his family can handle if the patient's condition deteriorates or maybe in the case of a death that may occur in the patient.

The result of correlation test showed that depression has a positive correlation with the level of education, which means that patients with higher level of education can be depressed when the face surgery, but anxiety has a negative correlation value which means that the higher the education level, the lower the anxiety level.

Santos et al. in other studies indicate that the stress experienced in the pre-surgery period did not correlate with age, marital status, or their previous surgery. The differences were found that the level of depression in the pre-surgery period in accordance with academic qualifications strengthened by the fact that education promotes the demand for access to information and a greater understanding of the entire surgical process and that can increase the tendency to depression (Dos Santos, et al., 2014)

From 50 patients who became the sample in this study showed that 43 people or about 86% were depressed and 7 or as much as 14% were not depressed, while from 50 patients, 19 patients or 38% had anxiety and 31 people or 62% did not experience anxiety.

Allen, et al. (2002), reveals the prevalence of anxiety experienced by pre-surgery patients has been reported by several researchers, which were by Norris and Baird who is one of the early research on the incidence of anxiety. 500 patients were assessed by clinical observers to be trained for the presence of pre-surgery anxiety based on the answers to a series of questions and other physical signs. From the total sample, 60% were found to have pre-surgery anxiety. Ramsey in 1972 also used clinical judgment to determine the presence of pre-surgery anxiety with a sample of 382 patients. Two

hundred and seventy-nine (73%) of these patients were classified to have pre-surgery anxiety. Thornton et al. on his study in 1997 used a sample of 89 gynecological patients, reported a prevalence of significant clinical pre-surgery anxiety, which was 54%.

The management of handling anxiety and depression for patients who will undergo surgery is an integral part of the conduct of surgery. Persuasive approaches by nurses and doctors in providing explanations about the activities of surgery to be carried out and post-surgery and things related to the disease being suffered by patients can help patients to face the surgery that will be performed.

According to Davis-Evans (2013), in the management of anxiety management in nurse patients must use effective communication techniques when preparing patients for surgery. Patients receive a lot of information before surgery procedures go on and patients may not be able to process most of the information given because of increased anxiety and because many medical terms used in communicating surgery procedures are unfamiliar to patients. The nurse must try to explain the surgical procedure. The nurse must repeat the information given several times so that the patient is in giving the patient information to the patient little by little.

Interventions carried out by the hospital to reduce anxiety and depression in patients who will undergo surgery will be more effective if there is social support from the environment closest to the patient, both parents, wife / husband, and children. Social support for patients will provide psychological strength in fighting anxiety in themselves.

According to Mitchell (2012), many patients want friends or relatives to stay with them, and patients hope that their presence can help reduce anxiety. Doctors and nurses are seen as experts and physically close can improve perceptions of patient safety, this is considered similar to the presence of a mother for her child.

The role of human resources in the management of handling stress and depression in patients who will undergo surgery can influence the patient's stress level. The comfort felt by patients because the services provided by health workers can help generate a sense of trust in health workers, to reduce anxiety and stress.

One of the most important elements to reduce the sensation of patient anxiety is the nurse's qualification level. This can be supported by building the right training system. It is recommended that in addition to theoretical classes, training activities must be organized within the framework of a nursing training system where students will have the opportunity to talk to patients, practice how to reduce anxiety and discuss experiences gained with instructors (Komolafe and Csernus, 2015).

The results of qualitative research conducted by Tabrizi, et al. (2015), showed a positive impact on the behavior of health workers in reducing parents' anxiety and children who will undergo surgery. Despite research reports to show the usefulness of education using booklets on reducing anxiety for pre-surgery patients.

## **CONCLUSION**

Based on the result of this study, it is concluded that depression and anxiety in patients who will have surgery have no significant relationship with the management of anxiety and depression treatment given. The level of depression in patients was high and was not affected by the education level of the patient, while the level of anxiety is negatively correlated with the level of education. It means that the higher the level of education, the better the ability to manage stress, and thus the stress level is lower.

The management of anxiety treatment, in the form of knowledge of how the process of surgery that will be undertaken by the patient and impacts after the surgery, has not been able to reduce the level of depression and anxiety of pre-surgery patients. The improvement of the quality of human resources in handling the anxiety and depression in pre-surgery patients is expected to further increase the effectiveness of services provided.

## **RECOMMENDATION**

For related agencies to be able to encourage the improvement and development of Human Resources related to the skills of handling anxiety and depression, and expected in its implementation can

be more involved families who are expected to provide positive support for patients.

Management of handling stress and depression in pre-surgery patients will be more effective with the existence of social support from the family. Therefore it is expected that the active role of the institution is related to encouraging the patient's family to provide social support.

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