Provision of Informed Consent towards the Level of Anxiety in Pre-operation Patients at Mamuju District Public Hospital

Pemberian Informed Consent terhadap Tingkat Kecemasan pada Pasien Pra-Operasi di Rumah Sakit Umum Daerah Mamuju

Abstract
Surgery is one of medical procedures that can be a stressor causing anxiety in patient. In Mamuju district hospital, informed consent is considered as medical procedure. This study aimed to determine the influence of informed consent provision towards the level of anxiety in pre-operative patients at Mamuju District Public Hospital. The population in this study was pre-operative patients. Accidental sampling approach was applied to obtain a total of 32 samples. This quantitative study used quasi experimental design with a non-equivalent time sample design which was analysed using the Wilcoxon statistical test. The results showed that there was the effect of provision of informed consent on the level of anxiety in pre-operative patients at Mamuju District Public Hospital. Informed consent can reduce anxiety in pre-operation patient at Mamuju District Public Hospital.

Keywords: Anxiety, informed consent, pre-operation patients


Correspondence: Imelda Appulembang, Nursing Department, Mamuju Health Polytechnic Ministry of Health, Mamuju, West Sulawesi, Indonesia 91511, Phone: +62 8114 131 909, e-mail: imeldaappulembang@yahoo.com
Received: December 1st 2016
Revised: January 29th 2017
Accepted: May 17th 2017
Introduction

Surgery is a medical procedure that will cause a stressor to the integrity of the person. Surgery would have severe repercussions both physiological and psychological stress. One of the psychological responses is anxiety.

Anxiety in the pre-operation is something natural. The anxiety experienced by patients has various reasons, such as anxious face to surgery room and surgical equipments, anxious face to body image in the form of deformed limbs, anxiety and fear of death when anesthetized, anxious if the operation fails, anxiety of costs because surgery costs are very expensive and the variety of several other reasons that may cause anxiety among patients. Some patients who experienced severe anxiety were forced to postpone the surgery because they were not ready mentally to face surgery.1

Meanwhile, nurses that manage patients who undergo surgery sometimes pay less attention to the things that lead to anxiety for the patients, less communication with the patients, and less to give an explanation to the patients. Stress and anxiety can occur in individuals with a low level of knowledge due to lack of information obtained.2

Therefore, providing clear information to patients regarding pre-operative measures is necessary, one of which is through the provision of informed consent. Informed consent is consent given by the patient or guardian who is entitled to the doctor to perform a medical procedure on a patient after the patient or guardian completes information and understands that action. In other words, an informed consent agreement is also considered as medical action.3

Mamuju District Public Hospital is type C which is also a referral hospital in Mamuju. The hospital also provides services in the field of surgical nursing. The main concern of care in surgical wards is treating patients who are undergoing a surgical procedure and in the process of recovery. The principle of treatment for many patients in surgical wards is implementation of the pre-operative preparation to ensure the safety of patients who undergo surgery. Nurses tend to see pre-operative patient care as a matter of routine. If most patients experience the same type of surgery, this requires a planning standard of care or checklists to guide nurses.4 It is worth to note that the experience of being hospitalized and undergoing surgery is not a routine matter for the patient (family), so mental preparation and support from the nurses are needed by every patient.

Providing complete and understandable information for pre-operation patients is very important factor, but can reduce the level of anxiety in patients and be the approval basis of medical action for the patients. Based on study by Arisandi,5 about the effect of giving informed consent to anxiety level of patients with pre-surgery in Tugerejo Hospital Semarang, there was no influence of age, sex, and education level before and after informed consent given.

The result of the above study is inversely proportional to this study. Therefore, based on these results, this study was trying to prove assumptions that provision of informed consent could reduce anxiety of pre-operative patients, especially at Mamuju District Public Hospital.

Method

This study was conducted from January to June 2016. This study applied quasi experimental design approach with non-equivalent time sample design. This design is a form of experimental design in which the sample in this study was observed first before being treated, then after treatment was given, the sample was observed back. This type of study was used to explore whether there was the effect of informed consent provision by nurses on the patient’s anxiety level.

The population in this study was all patients who would undergo surgery and were being treated at Mamuju District Public Hospital by using accidental sampling technique with a sample size of 32 people. Data collection used questionnaire as a measuring tool. Then data analysis used the Wilcoxon statistical test.

Results

This study at Mamuju District Public Hospital found that most of respondents were at the age of 36-46 years old with a total of 10 respondents (31.2%), male sex with a total of 22 respondents (68.8%) and graduated from senior high school with a total of 14 respondents (43.8%).

In this study, the bivariate analysis was conducted to provide an overview of respondents by the effect of giving informed consent on the level of anxiety in patient’s pre-operation at Mamuju District Public Hospital. The statistical test using Wilcoxon obtained z value = 3.945 table where the value of z = 1.96. This indicates that the calculated value of z > z table, the null hypothesis (Ho)
is rejected and the alternative hypothesis (Ha) is accepted, which means that there was effect of informed consent provision to the level of anxiety in pre-operation patients at Mamuju District Public Hospital (Table 2).

### Discussion

Anxiety measurement used a questionnaire measuring tools by using scale HRS-A (Hamilton Anxiety Rating Scale). HRS-A scale is a measure of anxiety that is based on the emergence of symptoms in individuals who experience anxiety. According to the scale of HRS-A, there are 14 symptoms seen in individuals who experience anxiety. Each item was observed by 5-level score (Likert scale) is between 0 (zero Present) to 4 (severe).

To determine the level of anxiety, the patients were measured approximately 1-2 hours before surgery. At the time of measurement, patients were interviewed. At the time of the interview, the patients were given a question in accordance with standard questions on a scale of HRS-A. In addition, treatment was provided to patients by explaining the patient’s illness, measures to be taken to the patient at the time of surgery, the risk of the effects and side effects which were likely to be suffered by the patient during and after surgery, as well as an explanation of the long process of healing after surgery.

Provision of treatment expectedly describes the whole process of surgery that is performed by doctors, so patients may have a picture and already imagine the process of the operation to be conducted by physicians. This would make patients mentally prepared, no longer panicked to face surgery process.

After all questions were asked and investigators had obtained results of the assessment of each question, the level of patients’ anxiety was then determined in aim to find how much the patients’ anxiety level before surgery.

Results of this study opposed against study by Arisandi.5 According to study by Arisandi,5 the granting of informed consent did not affect patients’ anxiety level in Tugerejo Hospital of Semarang. However, this study found effect of giving informed consent on the anxiety levels of pre-operative patients at Mamuju District Public Hospital.

In addition, Arisandi,5 study also stated that there was no influence of age, sex, and level of education before and after informed consent provided. This study also tried to explore the determinant factor that could affect the patients’ level of anxiety in terms of age, sex and education.

This study found that the largest percentage (31.2%) of pre-operative patients’ age at the Mamuju District Public Hospital was between 36-46 years old. It quite affected the patients’ level of anxiety because anxiety could be influenced by the age factor. Study by Woodrow et al., in Widyastuti,6 found that tolerance to pain increases with increasing age, for example, the older a person’s age, the more increasing the understanding of the pain and effort to overcome them. Conversely, according to Kaplan & Sadock in Widyastuti,6 the younger suffered more anxiety than the older.

Older patients were found easier to compensate sense of anxiety than the younger patients because the older were psychologically prepared better. This is proven by full concentration on informed consent given, which older patients might more easily receive information, despite the fact that the provision of informed consent is also effective on all age groups.

According to Mahat & Scoloveno,7 age of a person can determine their ability to make decisions. The younger the person the more difficult to make a decision. Several studies suggest that the younger a person, then one's anxiety will be higher. Several other studies also noted that there was no effect between age and anxiety level of patients who were hospitalized.8

Beside the age factor, the level of education might also affect a person’s anxiety level. This is proven by the patients who had a low education level of anxiety were more severe than other patients who had higher levels of education. This is in line with study by Prihyanto,9 who found that education has an exponentially relation to the health level. The higher level of education, more easily accept the concept of healthy life independently, creatively and sustainably to influenced the anxiety level.

Health workers (doctors and nurses) play an important role in providing information (informed consent), so the patient’s anxiety can be reduced. Patients were given informed consent in accordance with the elements of informed consent. The initial stage is to prepare the patient physically and psychologically.10 One of the roles of health workers here is the psychological preparation, which is the provision of informed consent that aims to reduce the anxiety levels of patients through the fulfillment of information regarding the surgery. Informed consent provision describes the interactive process in providing information and explanation of the process of the operation, anticipated sensation, anticipated sensation, and listens to the patients who will undergo surgery. The health worker should listen well and provide an oppor-

### Table 2. Comparison of Anxiety Levels before and after the Informed Consent

<table>
<thead>
<tr>
<th>Category of Anxiety</th>
<th>Level of Anxiety</th>
<th>Before</th>
<th>After</th>
<th>Z Value</th>
<th>p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>n  %</td>
<td>n  %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anticipative</td>
<td></td>
<td>6  18.8</td>
<td>14 43.7</td>
<td>-3.945</td>
<td>0.000</td>
</tr>
<tr>
<td>Mild anxiety</td>
<td></td>
<td>15 40.6</td>
<td>11 34.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate anxiety</td>
<td></td>
<td>4  12.5</td>
<td>3  9.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Severe anxiety</td>
<td></td>
<td>9  28.1</td>
<td>4  12.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Panic</td>
<td></td>
<td>0  0</td>
<td>0  0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This study found that the largest percentage (31.2%) of pre-operative patients’ age at the Mamuju District Public Hospital was between 36-46 years old. It quite affected the patients’ level of anxiety because anxiety could be influenced by the age factor. Study by Woodrow et al., in Widyastuti,6 found that tolerance to pain increases with increasing age, for example, the older a person’s age, the more increasing the understanding of the pain and effort to overcome them. Conversely, according to Kaplan & Sadock in Widyastuti,6 the younger suffered more anxiety than the older.

Older patients were found easier to compensate sense of anxiety than the younger patients because the older were psychologically prepared better. This is proven by full concentration on informed consent given, which older patients might more easily receive information, despite the fact that the provision of informed consent is also effective on all age groups.

According to Mahat & Scoloveno,7 age of a person can determine their ability to make decisions. The younger the person the more difficult to make a decision. Several studies suggest that the younger a person, then one's anxiety will be higher. Several other studies also noted that there was no effect between age and anxiety level of patients who were hospitalized.8

Beside the age factor, the level of education might also affect a person’s anxiety level. This is proven by the patients who had a low education level of anxiety were more severe than other patients who had higher levels of education. This is in line with study by Prihyanto,9 who found that education has an exponentially relation to the health level. The higher level of education, more easily accept the concept of healthy life independently, creatively and sustainably to influenced the anxiety level.

Health workers (doctors and nurses) play an important role in providing information (informed consent), so the patient’s anxiety can be reduced. Patients were given informed consent in accordance with the elements of informed consent. The initial stage is to prepare the patient physically and psychologically.10 One of the roles of health workers here is the psychological preparation, which is the provision of informed consent that aims to reduce the anxiety levels of patients through the fulfillment of information regarding the surgery. Informed consent provision describes the interactive process in providing information and explanation of the process of the operation, anticipated sensation, anticipated sensation, and listens to the patients who will undergo surgery. The health worker should listen well and provide an oppor-
tunity for clients to explore expectations, goals, opinions, and what is perceived by the patient.11

The conclusion of this study also supported the study by Azevedo et al.,12 about “anxiety of patients regarding informed consent to administration of intravenous iodinated contrast material”. The study showed a significant difference between the variables of informed consent with anxiety. Several other studies including study conducted by Yucel et al.,13 about “Effect of Informed Consent for Intravascular Contrast Material on the Level of Anxiety: How Much Information Should Be Given?” the study showed that the anxiety level for 88 patients receiving Form 1 decreased after they were given the informed consent. However, among the 103 patients receiving Form 2, the anxiety level showed a significant increase compared to the values obtained before Form 2 was given. Conclusion of the study was that these results indicate that informed consent, including brief information about the risk factors and potential adverse reactions of IVCM reduces anxiety level, while detailed information before the procedure increases the anxiety level.

Likewise, study by Betti et al.,14 titled “Effect of the Informed Consent Process on Anxiety and Comprehension of Patients Undergoing Oesophageal and Gastrointestinal Surgery” showed support to this study, in which the provision of informed consent is more effective in reducing anxiety of patients who will do oesophageal and gastrointestinal surgery.

There were still limitations study conducted, for example the limited number of samples. Further research is expected to involve more number of samples with wider coverage. Another limitation was the data retrieval. This study did not concern on socio-economic perspectives, the size of the operation and the number of times patients have undergone surgery.

The advantage of this study is that handling of patients’ anxiety can be improved, particularly in Mamuju District, instead of only focused on sedation. Therefore, this study suggested the treatment of anxiety using sedation can be minimized by using informed consent provision method because it is more affordable and has no side effects resulted by the consumption of medication that contain chemicals. In addition, using informed consent for decreasing patients’ anxiety can reduce reliance on the use of drugs.

Conclusion

Feelings of anxiety experienced by patients in the hospital can be treated with a variety of approaches, such as through the provision of informed consent. This study proves that provision of informed consent can reduce anxiety in pre-operative patients at Mamuju District Public Hospital.

Recommendation

Informed consent provided to patients for the whole process of surgery will make patients have a depiction of the operation before the surgery, so this is an effective way to reduce their anxiety as they will get better prepared mentally and psychologically. Patients will feel no longer panic when the time of operation comes, as well as provision of informed consent may build their confidence to show how they feel. Results of this study can be used as input for developing a standard operating procedure in which informed consent should be immediately provided by health personnel to patients before surgery.

Acknowledgment

We would like to thank to all people who have helped us conduct this study, especially to the Mamuju District Public Hospital who have granted permission and advice in doing study on post-operative patients treated at the Mamuju District Public Hospital.

References

