

Analysis of the Factor that's Influence an Increase of Cost of Post-Operative Care on the Central Surgical Installation at Jombang General Hospitals

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ABSTRACT

Post-operative treatment and recovery anesthesia desperately need professional nursing skills. Skills in the post-operative care of patients is urgently needed to prevent complications that lengthening the home care pain or harm themselves. The old days of post-operative patient care need great attention because of some complications can occur after surgery if not handled properly, can make long day care be long that can eventually lead to the occurrence of the increase in the cost of treatment to the patients as well as the hospital. The purpose of the research is to analyze the cost of post-operative care enhancement due to hypothermia on the Central Surgical Installation At Jombang General Hospitals. The research design was analytic observational with a quantitative approach. Research variables i.e. factor causes the occurrence of hypothermia as the independent variable, the dependent variable costs increase. This research population throughout the patient's post-operative at Central Surgical Installation At Jombang General Hospitals with the average number of patients per month as much as 326 patients. Samples taken with the technique of simple random sampling as much as 180 respondents. Data is collected with instruments ceklist and processed in coding, editing, tabulating and scoring as well as tested with dummy regression test. The regression results show that the dummy variables that influence directly are in long treatment in recovery room and hipotermi events because the value of a p value < 0.05. While variable, the type of anaesthetic, BMI and long operations have no effect directly against the increase in the cost of treatment in the recovery room space. The existence of a decrease in body temperature of the patient requires more intensive than the handling of patients in a State of normal body temperature, and also requires additional equipment hipotermi patients, oxygen and heating to be able to restore the patient's body temperature in normal conditions, thus affecting an increase in treatment costs in the recovered unconscious.

Keywords: BMI, type of anasthesia long of operation, hypothermia, cost of care, post operative

INTRODUCTION

Post-surgical care of patients can be complex due to physiological changes that may occur, including complications of bleeding, irregular heart rhythms, respiratory disorders, circulation, temperature control (hipotermi), as well as functions other neurological functions such as vital, the integrity of the skin and wound conditions, functions of the genito-urinaria, gastrointestinal fluid and electrolyte balance, as well as a sense of comfort (Potter & Perry 2010). Some of the shivering which is the occurrence of complications from hypothermia (Zhu, y., et. al., 2017) the patient may experience undesirable due to the low temperature in the operating room, the cold fluid with infusion, inhalation of gases that cool, kavitas or open wounds on the body, muscle activity decreases, advanced age, (Yi, j., et. al., 2015).

Hypothermia occurs because agents from drugs suppressing oxidative metabolism rate anaesthetic that generates body heat so intrusive regulation of body heat (Hujjatulislam, 2015). Hypothermia is a complication of post anaesthetic which is often found in the recovery room good post general or regional anaesthetic. Hipotermi is a State of body temperature less than 36^o C (Torossian a. 2015). Every patient who had surgery are in the risk of experiencing hipotermi events (Diaz, v. and j. Newman, 2015).

Hujjatulislam (2015) stated the incidence of hipotermi as much as 20-27% related to factor the extent of cuts that are open and not fabric covered over in the operating room and views of the old factor relationship of the operation, as many as 60% of patients undergoing hipotermi post anesthesia. Diaz, v., and Newman, j., (2015) mentions that the incidence of Infections area of operation (surgical site infection) happened is associated with some risk factors include diabetes, smoker, obesity, malnutrition, hypothermia and events operations old of post-operative so long treatments that extend the result in increased medical costs. Harahap (2014) research in Hasan Sadikin HOSPITAL in Bandung, mentions figures for the incidence of hipotermi while patients are in the IBS as much as 87.6%, according to Alsandra (2014), get a body mass index of factors results (IMT) that thin is associated with hipotermi as much as 92.3%. Research results Umah (2013), mentions 87% of patients who underwent hipotermi surgery post anesthesia-related factors of liquid given appropriate room temperature (cold). Tamsuri (2012), when the temperature is less than 36^oC is used as a benchmark, then the incidence of hipotermi of 50-70% of all patients undergoing surgery. Penyulit hipotermi post anesthesia, unavoidable especially in patients a baby/child and elderly (elderly). Hypothermia or State body temperature 36^o C < is incident experienced by 26%-90% of patients post elective surgery. Very high risk of hypothermia in patients over 60 years old with the status of poor nutrition and illnesses that plague the termoregulasi not normal as in diabetes mellitus with polyneuropathy and on those who live major surgery or long. The temperature in the operating room also increases the risk of hypothermia: the lower the temperature the higher risk of hypothermia (Torrosian, et. all, 2015). The cause of the occurrence of hypotherima in post anesthesia among other cuts a broad or wide operating, administering fluids, efect of the use of anesthesia agents. Hypothermia with suhu 34-36^oC became a phenomenon that often occurs in patients surgery (Diaz v. and j. Newman, 2015). Maintain body temperature under normal circumstances is an important aspect to maintaining patient safety patient satisfaction thus affecting the nursing services provided against (Danczuk et. all, 2015).

The uneven action will increase the average body temperature by increasing the energy content in peripheral temperature compartment of the body. This is important because hard pressed to cope with the drop in body temperature that accompanied vasodilatory actions result regional and general anesthesia so that the heat from the core of the body to the peripheral quickly. Traditionally, nurses applying blanket warmers to increase body temperature in patients in the postoperative recovery. At room temperatures 26^o C or more proven can decrease the incidence of hypothermia on patients young and old. To prevent hypothermia, then the balance of weight of body heat must be maintained through the balance between hot and production expenses, either through the body's own metabolic processes or heat source which originates from the external environment (Jeon, 2012).

Patients with postoperative shivering can slow down the healing of patients, about 60% of patients in the recovery room easily chills due to the effects of the use of anesthesia either general or spinal blocks (Manne, V.S.S.K. and Gondi, S.R. 2016). Of post-operative treatment and recovery anesthesia desperately need professional nursing skills. Skills in the post-operative care of patients is urgently needed to prevent complications that lengthening the home care pain or harm to the patient's self (Mubarakah, 2017). Long day care of post-operative patients are hospitalized patients since the day of the surgery to the patient's post-operative time need to get attention because of some complications can occur after surgery indeed not handled well, so long day care patients become long that can eventually lead to impact care costs be increased both to the patient as well as the Hospital (Sabiston, 2011). Granting of the information on the patient and family both before and after the implementation of the operation greatly contribute to improve the results the optimal operating on patients, reduce complications post surgery, the recovery operation after the devastating acceleration, and supports

recovery of patients from the operating room more quickly, so it will have implications for the cost of spending on the less (Kurniawaty, 2018).

Health financing has increased from year to year. In patients who undergo the surgery requires considerable expenses. The increase in these costs is increasingly difficult to overcome by the ability of the provision of funds from the Government or society. An increase in these costs may threaten access to and quality of health services so that solutions should be sought to resolve the problem of financing health care on the patient's post-operative result hipotermi. Cost analysis is required in every health service in order to increase health care biaua can be controlled and does not weigh patients and families so that health services can be performed optimally (Nuryanti, 2017).

Price of INA-CBGs defined on National Healthcare is the new rates after some evaluation and costing data retrieval from various types of hospitals and regions, so it is expected to be in accordance with the real costs spent on for the handling of the disease based on the diagnostic code. Research related tariff payment by INA-CBGs JKN system is still limited in Indonesia. because the new Government program is JKN Indonesia applied since the beginning of January 2014, so research is needed research that can provide inputs for the hospital as well as the Government and evaluate the suitability of the real costs related apendiktomi INA-CBGs (Nuryanti, 2017).

The Jombang General Hospitals is one of the Government-owned hospital in Ticino that strives to provide quality service and quality in patients especially in patients undergoing surgical process to avoid complications of post one surgical hypothermia so time treatment takes place faster and not an increase in the cost of patient care. Preliminary results of a study conducted in the basement of the Central surgical researchers Jombang General Hospitals obtained data based on reports of record medic there are some patients who experienced a post-surgical complication one is hypothermia after entering the space recovered aware. According to the Jombang General Hospitals this happens because factor IMT, long live the operation and on the type of anaesthetic used while undergoing the process of operations so that these circumstances extend patient care and increase the cost of care at pasie

MATERIALS AND METHODS

The research design was analytic observational with a quantitative approach. Research variables i.e. factor causes the occurrence of hypothermia as the independent variable, the dependent variable costs increase. This research population throughout the patient's post-operative at Central Surgical Installation At Jombang General Hospitals with the average number of patients per month as much as 326 patients. Samples taken with the technique of simple random sampling as much as 180 respondents. Data is collected with instruments ceklist and processed in coding, editing, tabulating and scoring as well as tested with dummy regression test.. Implementation began in November – Desember 2018. As for the assessment of each of these variables can be explained in the following way:

1. Measurement Hipotermi

To assess the occurrence of hipotermi researchers use the body temperature measurement criteria according to Danczuk (2015) as follows:

- a. mild Hypothermia): 35, – 35.9 ° C
- b. Hypothermia are: 34 – 34.9 ° C
- c. severe Hypothermia: ° C 33.9 <
- d. Normotermia: 36-37.5 ° C

2. Measurement of the increased maintenance costs

To find out whether there is an increase in the maintenance costs of the researchers conducting observation costs to be borne by patients who experienced post-operative hipotermi. In order to facilitate the assessment of kreteria defined as follows:

- a. an increase in the cost of treatment.

- 1) very high if > 100%
 - 2) high if between 50 – 99%
 - 3) Medium if 25 – 49%
 - 4) Low if < 24%
- b. is does not an increase in maintenance costs
3. Analisis Bivariat dan Multivariat

To find out whether or not there is a relationship between variables used Test Spearman Rho because of the scale of ordinal data used and to perform multivariate test researchers using dummy regression test

RESULT

1. Partial analysis

Tabel 1 Regression analysis dummy partially factor that affects the increase in costs in the Central Surgical Instalation at Jombang General Hospitals at December 2018 (n = 180)

Variabel	B	S.E	t	Sig
(Constant)	2828.499	791.905	3.572	.000
BMI	2.139	32.991	.065	.948
Time Of Operation	1.308	2.981	.439	.661
Time Of Nurse Care In RR	96.294	3.096	31.098	.000
Type Of Anastesy	504.180	207.633	2.428	.066
Hipotermi	21045.850	227.257	92.608	.000

Based on the results in table 1 shows a partially variable long treatment in RR and hipotermi affect the occurrence of the dependent variable (increased costs), whereas the variable BMI, long operation and the type of anaesthetic do not affect directly the against the increase in the cost of treatment in the recovery room. This is indicated by the value of the variable on the significance of BMI= 0.948, long operation = 0.661, long care = 0.000, types of anesthesia = 0.066, and hipotermi = 0.000 so value the significance of all independent variables < 0.05. Based on the results of the beta coefficient values (B) explaining that the dependent variable will change if the independent variable is changed 1 unit, sake can be summed up in the koleom B obtained the highest value is hipotermi so the genesis of Genesis hipotermi is the most dominant factor affecting is the increase in maintenance costs.

2. Determination Koefficient Analysis

Tabel 2 Analysis of Test coefficient determination of factors affecting the increase in costs in the Central Surgical Instalation at Jombang General Hospitals December 2018 (n = 180)

Model	R	R Square	Adjusted R Square	Std. Error the Estimate	Durbin-Watson
1	.793 ^a	.756	.776	1344.082	1.045

Table 2 explains that the value R Square (R²) of 0.756 or 75.6% indicating the contribution of independent variables to affect the dependent variable (increased costs). While the remaining 1.4% in influence by other factors that do not exist in this research model. Multiple correlation coefficient is

used to measure the keeratan relationship between the dependent and independent variables. Multiple correlation coefficient indicated by value (R) of 0.793 or 79.3% indicating that the independent variables the dependent variable to (increased costs) and have a strong influence.

DISCUSSION

A. Hipotermi Factors based on the type of Anesthesia

Based on the type of anesthesia data obtained by the majority of respondents obtain anesthesia general as much as 96 respondents (53%). Based on cross-tabulations between types of anesthesia obtained data from 96 respondents who obtained a general anesthesia data obtained most of the decline in the category of body temperature (35-35,9 ° c) hipotermi light by as much as 49 respondents (51%) and who did not experience changes in body temperature or body temperature under normal circumstances (normotermi) as many as 44 respondents (45.8%) and respondents who experienced a decrease in body temperature pretty much or having hipotermi the weight of as much as 2 respondents (2.15) and 1 respondents with decreased body temperature in the category of medium or medium hipotermi (1%). Based on the results of the test show the value significance of bivariate = 0.005 0.05 so accepted $H_1 < \alpha$ means there is a relationship between the type of anesthesia with the classification temperature (temperature increase in patients post operation).

The word anesthesia was discovered by Oliver Wendell Holmes, meaning describes a State of unconscious while because the drug is put into the body that aims to relieve pain during surgery (Latief, 2012). General Anesthesia was done with anesthesia to block the center of consciousness the brain to remove the awareness, leading to relaxation and loss of taste. The method of granting General anesthesia is by inhalation and intravenous. At the end of anesthesia anesthesia drugs can cause hipotermi (Danczuck, R.F.T. et. al, 2015). It is caused due to the effects of general anesthesia or medication that causes disruption of regional termoregulasi (Manunggal, H.W. et al. 2014).

The majority of respondents in this study obtained with other types of anesthesia general anesthesia. This is done because the conditions being experienced by the patient requires the granting of anesthesia was done thoroughly, because if only given anesthesia are spinal may affect the process or length of time the operation and impact on a patient's condition . Anesthesia medication given to patients would affect the State of the patient because of the side effects of anesthesia medications, one of which is hipotermi or drop in body temperature. The temperature decline due to induction of anesthesia affects the occurrence of vasodilatory which causes the process of losing body heat occurs continuously. Heat is produced continuously by the body as a result of metabolism. The production process as well as the heat expenditure is governed by the body to maintain core body temperature within the normal range. anesthesia medication given to patients affect body temperature system settings don't function normally or interference occurs in termoregulasi patients. Cross-tabulate results indicate that BMI effect directly against the occurrence of hipotermi in the State so that respondents would cause long Recovery room care Room and the actions taken to increase the temperature of the the patient's body which ultimately affects the cost of treatment in the Recovery Room space increases a patient's body temperature rather than under normal circumstances.

B. Factors Hipotermi the based on Time Of Operations

Based on time of operation data that patients obtained operating most respondents had surgery < 1 hour as many as 112 respondents (62%) and a small proportion had surgery during > 2 hours 8 respondents (5%). Based on cross-tabulations between long operations with the classification temperature obtained data from 112 respondents who had surgery less than 1 hour shows that a majority of respondents experienced a change in body temperature but decrease in temperature is not too much or can be said to belong to hipotermi light (35-35,9 ° c) as much as 57 respondents (50.95)

and who did not experience a change in temperature or tuuh body temperature under normal circumstances (normotermi) as many as 55 of the respondents (49.1%). Based on the results of the test bivariat test show the p value = $0.000 < 0.05$ so accepted H1 it means there is a connection between the long operations with the classification temperature (temperature increase in patients post operation)

A long surgery and anesthesia can potentially have a big effect in particular drug anesthesia with a higher concentration in the blood and tissues (particularly fats), solubility, duration of anesthesia, so that these agents should be trying to achieve balance with the network. Induction of anesthesia resulting in loss of process that cause the vasodilatory body heat occurs continuously. When heat is produced continuously by the body as a result of metabolism. The production process as well as the expense of heat is regulated by the body to maintain a core body temperature in the range of 36 -37, 5oC (Steelman et. Al., 2017).

The results of this study indicate that the long action operation or pemebdahan are accepted by patients will affect the occurrence of circumstances or the impact that does not chill one of them occurs hipotermi or drop in body temperature. The presence of hypothermia experienced by patients can extend long treatments experienced while in the recovery room so that it can affect patient care costs rise while in the operating room. The type of anaesthetic do not affect directly to increased maintenance costs in the Recovery Room will affect the onset of anesthesia but the type of hipotermi., while the presence of Gen. hipotermi in patients in the Recovery Room will affect the long treatment and increased maintenance costs because it takes additional action and medical equipment to raise the body temperature of the patient so that maintenance costs indirectly will increase

C. Factors of occurrence of hipotermi based on body mass index

Based on body mass index (BMI) data obtained by most of the respondents have the BMI in the normal category as much as 120 respondents (66.7%) and least in the obesity level 1 as much as 28 respondents (15%). Based on cross-tabulations between the body mass index (BMI) with temperature data obtained by most of the respondents classified in the IMT. From 120 respondents who had a normal category IMT mostly experienced a decrease in body temperature or having hipotermi light (35-35,9 ° c) by as much as 63 respondents (52.5%) and that is not changing body temperature or body temperature under normal circumstances (normotermi) as many as 49 respondents (40.8%), in addition there are a small percentage of the respondents experienced a decline in a State's heavy body temperature (33-33.9 ° c) or hipotermi weight by as much as 2 respondents (1.7%). Based on bivariate test data of significance value obtained = $0.006 < 0.05$ so that accepted H1 it means there is a relationship between the IMT with the classification temperature (temperature increase in patients post operation).

Body mass index is a description of the condition of a person's nutritional status. In people with low BMI will be easier to heat loss and is a risk factor for the occurrence of hipotermi, it is influenced by heat-producing sources of energy supplies that is thin, fat deposits of fat in the body is very beneficial as energy reserves. On a high body mass index have sufficient heat protection system with a heat-producing energy sources i.e. thick fat so that the IMT is high is better in maintaining body temperature compared to BMI which is low because it has more energy reserves (Valchanov et al, 2011).

The results of this research show that most of the nutritional status of respondents in this research included in the normal nutritional status and obesity level 1. Fat is one of the components of the body that can maintain body heat so that the temperature of the body in a State of stable temperature conditions, though in declining neighborhoods, the thickness of the fat that is owned by the respondents in this study affect terjadin or not hipotermi at the moment in the space conscious, the recovered thin fat or skinny respondents respondents will be prone to hipotermi or drop in body temperature than respondents with body condition under normal circumstances or excess. The old implementation of operations affects the occurrence of hipotermi in patients so that when patients experience hipotermi in the Recovery Room will get additional tools and actions to improve the patient's body temperature and this affects the increase in maintenance costs. This may indicate that the

old operation does not directly affect the occurrence of increased cost of perawat in patients in the Recovery Room.

D. Factors of occurrence of hipotermi based on long treatments in Recovery Room

Based on a long treatment in the Recovery Room data obtained nearly all of the respondents obtain the treatment that quickly or less than 2 hours as much as 163 respondents (91%) and a small part of undergoing treatment with slow or > 2 hours as many as 17 respondents (9%). Based on cross-tabulations between long treatment at room temperature classification obtained data from 163 respondents who underwent treatment in the Recovery Room quickly or 2 hour data indicates < that most experience mild hipotermi as much as 92 respondents (56.4%) and who experience normotermi as much as 61 respondents (37.4%), the hipotermi are experiencing as much as 9 respondents (5.5%) as well as the experienced hipotermi weight by as much as 1 respondents (0.6%). Based on the results of the test show the value significance of bivariate = 0.007 < 0.05 so that H1 accepted it means there is a connection between the long treatment at the Recovery Room with the classification temperature (temperature increase in patients post operation).

According to Majid, Judha & Istianah (2012) the patient may suffer hipotermi due to the exposure of the body far too long with low-temperature rooms in the operating room (26 < 60C). In addition, patients who underwent surgery in a heating blanket rarely use during surgery, so your body durante patients more exposed to the cold room temperature.

Long treatment experienced patients in recovered unconscious will influence decline body temperature in patients. patients who are exposed to the cold temperatures in the long term and there is also still the influence of anesthesia is given then the patient will easily drop in body temperature. Long treatment in the Recovery Room space can directly influence the increase in the cost of care, because patients who experience hipotermi in the Recovery Room to do additional actions or medical equipment that can help improve the patient's body temperature, so that this will affect the cost of care for peningkatan in the Recovery Room.

E. Hipotermi

Based on Genesis of hipotermi data indicate that most respondents included in the category of light hipotermi as much as 102 respondents (57%) and a small part belongs to the category of heavy hipotermi by as much as 2 respondents (1%).

Hypothermia is a State body temperature < 36⁰C (Torossian, 2015). Hipotermi as post anesthesia complications fastest during the first 24 hours after the action operations i.e. 10-30%, this affected the result of the actions of intraoperative fluid granting i.e. cold, inhalation of cold gases, open sores on the body, muscle activity decreases, the elderly or the anesthesia drugs used (Hanifa, 2017).

The results of this research show that the respondents suffered a drop in body temperature in the category of light between 35-35,9 0 c. This happens because the respondent has experienced a decrease in body temperature at the time of operation of intra so when they entered the space recovers conscious in a State of hipotermi. The occurrence of hipotermi on the respondents this happens due to the effect of drug anaesthesia which was given to the respondent so that respondents experienced impaired body temperature settings, moreover because of the length of the operation affects the length of the received anesthesia effects by the respondents.

F. Increase In Maintenance Costs

Based on the results of the increased costs that most respondents have an increased cost in the very high category as much as 112 respondents (62%) and a small part in high category as much as 1 respondents (1%). Based on cross-tabulations between the classification temperature by the increase in the cost of obtained data from 102 respondents who experienced mild hipotermi most respondents experienced increased costs is very high as many as 101 respondents (99%) and in respondents who

did not experience an increase normotermi mengalami cost as much (67%). Based on the results in table 2 shows the value of significance = $0.000 < 0.05$ so that H1 accepted it means there is a connection between the classification temperature (temperature increase in patients post operation) and increased costs.

Metabolic disorders affecting the Genesis hipotermi, also due to the effects of drugs used. General anesthesia is also affecting the third element of the termoregulasi consisting of afferent input elements, setting the signal in the central area and also the response of the efferent pathways, moreover, it can also eliminate the process of adaptation as well as interfere with the mechanisms of the physiology of fat/ on the function of skin termoregulasi namely shift the threshold for the response process of vasoconstriction, chills, sweating and vasodilatory also. The presence of hipotermi or decrease in body temperature in patients post operation will affect patient care in the old space conscious recovered increased costs thereby affecting patient care (Setiyanti, 2016).

The results of this research show that the occurrence of postoperative hipotermi in patients with general or spinal anesthesia affects the occurrence of increased cost of perawat patients. treatment in patients with hipotermi in need of additional tools and actions provided for in the recovered space conscious, so that with the State of the auto-maintenance costs are borne by the patient will be increasing rather than patients with a State of body temperature in the normal range.

G. Analysis of factors that affect the occurrence of increased costs of post-operative care in the Central Surgical Instalation at Jombang General Hospitals

Based on the results in table 1 shows a partially variable long treatment in recovery room and hipotermi affect the occurrence of the dependent variable (increased costs), whereas the variable BMI, long operation and the type of anaesthetic do not affect directly the against the increase in the cost of treatment in the recovery room. This is indicated by the value of the variable on the significance of BMI= 0.948, long operation = 0.661, long care = 0.000, types of anesthesia = 0.066, and hipotermi = 0.000 so value the significance of all independent variables < 0.05 . Based on the results of the beta coefficient values (B) explaining that the dependent variable will change if the independent variable is changed 1 unit, sake can be summed up in the koleom B obtained the highest value is hipotermi so the genesis of Genesis hipotermi is the most dominant factor influencing the cost of care is increased. Table 2 explains that the value R Square (R²) of 0.756 or 75.6% indicating the contribution of independent variables to affect the dependent variable (increased costs). While the remaining 1.4% in influence by other factors that do not exist in this research model. Multiple correlation coefficient is used to measure the keeratan relationship between the dependent and independent variables. Multiple correlation coefficient indicated by value (R) of 0.793 or 79.3% indicating that the independent variables the dependent variable to (increased costs) and have a strong influence.

Some research has proven negative impact against hypothermia patients, among others, is the risk of increased hemorrhage, ischemia myocardium, the older pascaanestesi recovery, impaired wound healing, as well as increasing the risk of infection. Hypothermia will increase the need of oxygen, carbon dioxide, and the production also increased levels of Catecholamines in the plasma will be followed by an increase in the rate of the pulse, blood pressure, as well as the bulk of the heart. This situation is not very favourable for geriatric patients, especially patients who have experienced a decrease in disturbances cardiovascular functions even and also pulmonal (such as hypertension, cardiac arrhythmias, heart failure, daninfark myocardium) (Buggy in Harahap, 2014).

The results of this research show that partially variable BMI, long operation, type of Anesthesia do not affect directly to increased costs, but because these variables affect the occurrence of hipotermi so as not to can directly affect the occurrence of increased costs. While the variables that affect the increase in cost is directly is in the care of the long treatment in recovery room and hipotermi events. This happens because of the presence of a decrease in body temperature of the patient requires more intensive than the handling of patients in a State of normal body temperature, and also requires additional equipment hipotermi patients, oxygen and heating to be able restore the patient's body temperature under normal conditions. The existence of additional actions and the equipment can affect the cost of patient care while in space to recover.

CONCLUSION

1. Type of anesthesia is most respondents in the Central Surgical Instalation at Jombang General Hospitals is general anesthesia by as much as 96 respondents (53%) and type of spinal anesthesia by as much as 84 respondents (47%). The type of anaesthetic does not affect directly the increase in the cost of treatment in the recovery room.
2. Long operation most respondents in the Central Surgical Instalation at Jombang General Hospitals is < 1 hour as many as 112 respondents (62%) and the old who underwent surgery > 1 hour as much as 68 respondents (38%). Long operation does not affect directly the occurrence of increased costs of care in the recovery room.
3. the body mass index (BMI) most respondents in the Central Surgical Instalation at Jombang General Hospitals included in the normal category as much as 120 respondents (66.7%), which is included in the category of level I as many as 28 respondents (16%) and are included in the categories under normal as many as 32 respondents (18%). BMI affect the occurrence of hipotermi on the post-operative patients so indirectly increased treatment costs affect IMT in the recovery room
4. Long treatment in recovery room of the Central Surgical Instalation at Jombang General Hospitals shows data almost entirely respondents receiving treatment that quickly or less than 2 hours as much as 163 respondents (91%) and as many as 17 respondents (9%) have a long treatment > 2 hours. Long treatment in the recovery room space affect directly the increase in the cost of treatment in the recovery room space
5. Most respondents in the Central Surgical Instalation at Jombang General Hospitals included in category light hipotermi as much as 102 respondents (57%)
6. Most respondents in the Central Surgical Instalation at Jombang General Hospitals experienced hipotermi as much as 113 respondents (63%) with a mild hipotermi details as much as 102 respondents (57%), hipotermi were as much as 9 respondents (5% 0 and hipotermi weight by as much as 2 respondents (1 %). While respondents who did not experience hipotermi as many as 67 respondents (37%). Events included influential factor hipotermi directly to increased maintenance costs in the recovery room.
7. Based on the results of the B values obtained the most dominant factor affecting the hipotermi is an event because it has a value of B.

SUGGESTION

1. For the Jombang General Hospitals

On behalf of the hospital can perform a cost analysis is required in every health services more effectively and efficiently in order to increase health care costs can be controlled and does not weigh patients and families so that service health can be performed optimally. In addition the management of the hospital can apply or make SOP execution handling impacts occurred on post-operative patients so that handling can be done appropriately and effectively.

2. For the officers

The research results can be used as information that can be used as a reference in optimizing the prevention of occurrence of post-operative hipotermi so that the officer can carry out handling and fast and with precision can reduce the cost of patient care.

3. For the next Researcher

Further research should be done by the time the implementation study longer or also add other peneltiian variables that impact on patient care is post-operative so research results can be obtained for the maximum and can be help develop science and technology in the field of health. .

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