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Comparison The Use Transparent Dressing with Conventional Fixation on Phlebitis Rates in Rumkitban 05.08.03 Sidoarjo

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ABSTRACT

Phlebitis is a major problem faced throughout the world and this incidence continues to increase. Phlebitis that occurs mechanically occurs when the type of fixation of the sterile gauze plaster is not strong enough or is not sticky enough, causing a change in the position of the catheter or friction in the internal area of the blood vessel which results in inflammation. Efforts to prevent the occurrence of phlebitis can be done by using a transparent dressing which can minimize bacteria entering through the attached vein, thereby reducing the occurrence of phlebitis. The aim of this research is to analyze the comparison of the use of Transparent Dressing with gauze on Phlebitis rates in RUMKITBAN 05.08.03 Sidoarjo. The design of this study is a comparative study, knowing the use of transparent dressings with conventional dressings. The number of samples taken using consecutive sampling was 73 patients. data collection method using an observation sheet instrument, the independent variables are Transparent dressing and conventional fixation, while the dependent variable is Phlebitis. In this study, researchers used SPSS software to carry out the Chi square test for research data analysis. Based on the results of the research and data analysis that has been carried out, it can be It was concluded that the results of research conducted on 73 respondents showed that there was a difference or influence between the use of Transparent Dressing and conventional dressing on Phlebitis rates at RUMKITBAN 05.08.03 Sidoarjo. From the research results, the author believes that the use of transparent dressings can prevent the entry of microorganisms that will enter intravenously because transparent dressings have no circulation at all.

Keywords: Transparent dressing, Conventional Fixation, Phlebitis

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INTRODUCTION

A hospital is a place where sick people are treated and placed in adjacent rooms or between one bed and another. In this place, patients receive therapy and care to recover, where sixty percent of patients treated at the hospital use IV drips. The use of infusion occurs in all health nursing environments such as acute care, emergency care, ambulatory

care and home health care (Scahffer, At.All, 2006). Intravenous infusion or therapy is one method or part of treatment to inject drugs or vitamins into the patient's body (Darmawan, 2008) in Yunus (2012).

Improper fixation techniques and less sticky plaster can cause unstable intravenous (IV) catheters resulting in irritation of the blood vessels (Pohan, 2006). Currently, in hospitals, 2 types of fixation are used to fixation of IV installation locations, namely conventional plaster dressings and transparent dressings. The use of a transparent fixation dressing can protect the insertion site from bacterial contamination (Potter & Perry, 2005).

Phlebitis is a major problem faced throughout the world and its incidence continues to increase. The incidence of phlebitis according to data from WHO was 9% in the UK in 2006, in Italy in 2005 it was 6.7%, in France in 2006 6.7 -7.4%. While in Indonesia there are no definite figures regarding the prevalence of phlebitis, this may be due to the fact that research and publications related to phlebitis are rarely carried out. Data from the Indonesian Ministry of Health in 2013, the incidence of phlebitis in Indonesia was 50.11% for government hospitals, while for private hospitals it was 32.70%. Research conducted by Nurdin (2013) at RSUD Prof. Dr. Aloe Saboe Gorontalo, found a phlebitis incidence of 7.51%. In a comparative study at RUMKITBAN 05.08.03 Sidoarjo, up to now, 2 types of fixation were used to fix the infusion installation site, namely conventional plaster dressing and transparent dressing, it was found that phlebitis occurred in conventional 3 people and 1 person in transparent dressing. The incidence of phlebitis in this hospital is said to be high because it is still above the standard set by the Indonesian Ministry of Health, namely ≤1.5%. In fact, this incident could have been prevented if the hospital implemented a control program consistently.

Efforts to prevent the occurrence of phlebitis can be done by using transparent dressings because their advantages include: long duration of use, namely 3X24 hours, easy to observe, prevents the entry of bacteria and is waterproof, easier to use, patient safety and comfort is guaranteed, has vermiable properties, more economical (Merkell, 2011).

METODE

3.1. Research design This research design is a comparative study, this design is focused on examining comparisons of the effects on groups of subjects without any treatment or engineering from the researcher (Nursalam, 2003). The aim is to determine the use of transparent dressings with conventional dressings on phlebitis rates in RUMKITBAN 05.08.03 Sidoarjo

3.2. Population, Sample and Sampling

3.2.1. Population

Population is a collection of individuals or research objects that have predetermined qualities and characteristics. Population is a generalization area consisting of objects or subjects that have certain qualities and characteristics determined by

researchers to be studied and then conclusions drawn (Sugiyono, 2011). In this study, the population was all patients undergoing infusion or intravenous therapy who were treated at RUMKITBAN 05.08.03 Sidoarjo a total of 180 patients.

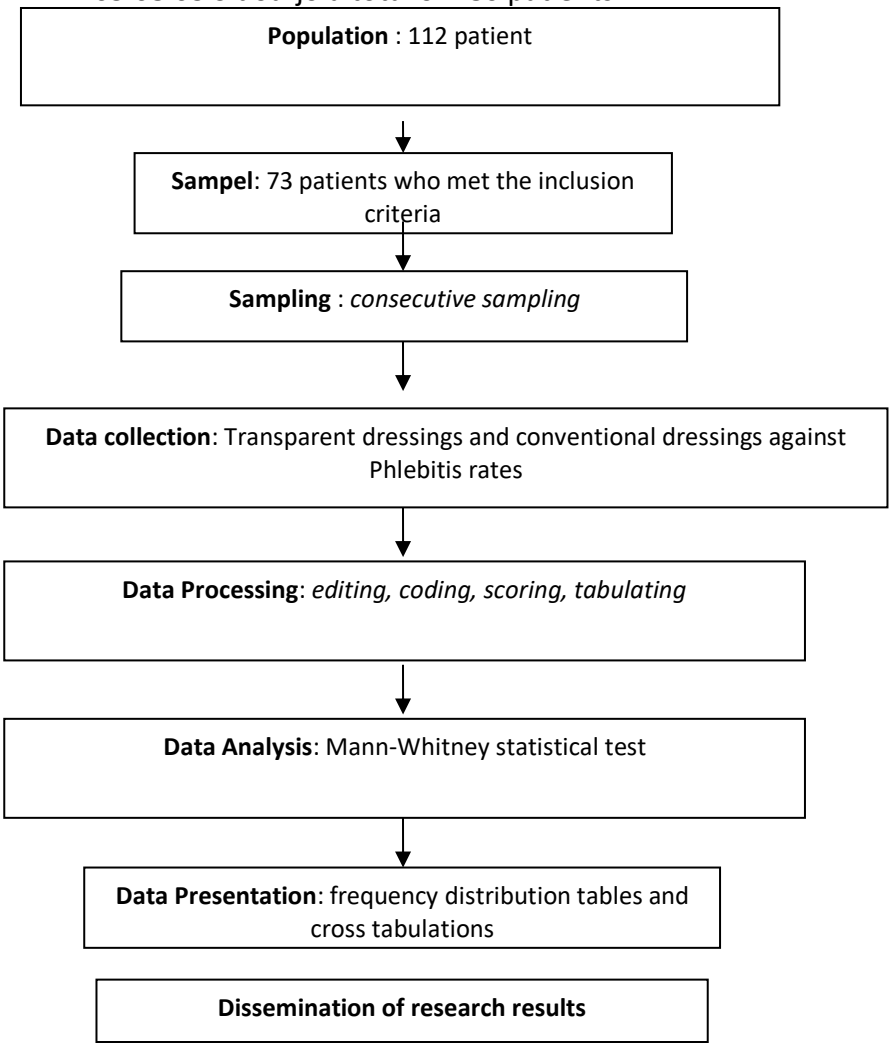

Figure 3.1 Framework for comparing the use of Transparent Dressings and conventional dressings on Phlebitis rates

RESULTS

The research aimed to find out the difference in effectiveness between transparent dressings and gauze dressings on the incidence of phlebitis which was carried out at RUMKITBAN 05.08.03 Sidoarjo, in January-April 2018. The sample used in this study was 73 respondents. The sampling technique used is the Consecutive Sampling method, which is the selection of samples by determining subjects who meet the research criteria, namely

the main criterion is that the person is a patient who underwent an infusion procedure, so that the sample can represent the characteristics of the population.

The analysis test used in this research is data analysis in this research using SPSS for Windows version 16.0 using the Chi Square statistical test. Research results at RUMKITBAN 05.08.03 Sidoarjo. A complete explanation will be presented in the table based on the research objectives that have been prepared.

Data Analysis

Normality

The normality test is used to determine whether data follows a normal distribution or not. To find out whether the data follows a normal distribution, it can be done using various methods, including the Kolmogorov Smirnov method, using SPSS 20 (Santoso, 2011: 77). The significance value or probability value is <0.05, then the distribution is not normal. And the significance value or probability value is > 0.05, then the distribution is normal.

Table 4.8 Normality Test

No	Variable	Value sig	Conclusion
1	Conventional	0,049	Abnormal data
2	Transparent dressing	0,021	Abnormal data
3	Phlebitis	0,043	Abnormal data

Source: Primary data, 2018

The normality test results in the table above, obtained from all variables (conventional, transparent dressing, phlebitis) have a sig value <0.05. So it can be concluded that the data distribution is not normal. Because the data is not normally distributed, the next test is the Chi Square Test.

Chi Square

Test Data analysis in this study used bivariate analysis which aims to see the relationship between the independent variables, namely conventional dressings and transparent dressings and the dependent variable, namely Phlebitis, using the Chi Square test. The results of research data analysis of the relationship between the independent variable and the dependent variable can be explained in the appendix.

Based on the results of the Chi square test, hypothesis testing can be carried out by comparing the significance level (P-value) with the error:

a) If sign. > 0.05, then there is no influence

b) If sign. < 0.05, then there is an influence In this case it can be seen that the p value is 0.012.

This means that there is an influence, the use of Transparent Dressing with conventional dressings on the Phlebitis rate at RUMKITBAN 05.08.03 Sidoarjo.

DISCUSSION

Based on the results of research conducted on 73 respondents, the results of statistical tests using Chi Square showed that there was an effect of using Transparent Dressing with conventional dressings on Phlebitis rates in RUMKITBAN 05.08.03 Sidoarjo. In the statistical test results, it was found that p = 0.012 (p ≥ 0.05), as much as 2.7% minimized the incidence of phlebitis compared to using conventional dressings. This means that there is an influence of using Transparent Dressing with conventional dressing on the Phlebitis rate in RUMKITBAN 05.08.03 Sidoarjo.

Transparent dressings are thin sheets of translucent material - generally polyurethane - available in a variety of shapes and sizes to suit different wounds (Merkell.2016). Conventional fixation according to Aswadi (2008) is wound treatment where the techniques used are natural and traditional, not yet developed in a modern way, which aims to heal wounds gradually and the process takes a long time depending on the wound suffered. Phlebitis is inflammation in the local area where the infusion is inserted and shows red signs, such as burning, swelling, pain when pressed, ulcers to purulent exudate or fluid discharge when pressed (Ministry of Health, 2017). Factors that influence the occurrence of phlebitis include: mechanics, bacteria and chemistry (Potter and Perry 2010).

The author believes that the use of transparent dressings can prevent the entry of microorganisms that will enter intravenously because transparent dressings have no circulation at all. At the time of the study all patients were given isotonic fluids. Transparent dressing also has many advantages, including:

Firstly, the use of transparent dressings has a longer duration, namely 7 days, compared to using conventional dressings, namely gauze, which only lasts 2 days. This type of dressing is very easy to observe, both transparent dressings prevent contamination of other objects and are waterproof so as to provide safety and comfort for the patient. The third benefit of transparent dressings is that they are permeable and more economical because bacteria cannot live around the insertion area If using conventional fixation, the duration of use is shorter, and observing the IV needle is very difficult because it cannot be seen. Using conventional fixation is very risky for contamination of other objects because it is not watertight and has a lot of circulation. And conventional fixation is not permeable so bacteria can grow around the insertion site and the use of conventional fixation is changed every day.

CONCLUSION

Based on the results of the research and data analysis that has been carried out, it can be concluded that the results of the research conducted on 73 respondents showed that the use of Transparent Dressing minimized the phlebitis rate compared to conventional dressings at RUMKITBAN 05.08.03 Sidoarjo as proven by the use of transparent dressing the phlebitis rate was 2.7% and the use of conventional fixation resulted in a 6.8% phlebitis rate.

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