

# Differences In The Intensity Of Pain During Surgical Wound Treatment Between Patients Using Distraction And Relaxation Techniques At The Derah Gunungsitoli General Hospital In 2020

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## ABSTRACT

Wound care is an action to prevent infection and accelerate wound healing. But in its implementation can increase the intensity of pain. The results of a preliminary study of 87.5% of the sample stated that the pain increased during wound treatment. To reduce pain, pain management is used both pharmacologically and non-pharmacologically. Non-pharmacologically there are various techniques such as stimulus and massage kutaneus, distractions, ice and heat therapy, hypnosis and relaxation. This study aims to prove that there is a difference in pain intensity between using distraction techniques and relaxation during surgical wound treatment. This type of research uses quasi-experiments, the methods used are pre-test and post test group design. The sample consisted of 30 respondents selected by means of sampling quotas then divided into two, namely 50% received distraction technical treatment and another 50% received relaxation treatment. Data collection is carried out with .

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## 1. Introduction

Pain management is carried out pharmacologically and nonpharmacologically. Pharmacological treatment is to use drugs such as analgesics, steroids, NSAIDs, opioids, anesthetic drugs, while nonpharmacological, namely The onset or increase in the intensity of pain is not only caused by disease but nurse actions such as treating wounds can increase the intensity of pain.

From a preliminary study conducted at Gunungsitoli Regional Hospital, it was found that 87.5% of postoperative patients complained that their pain increased during dressing replacement or when the wound was cleaned. To reduce pain stimulation, patients are recommended to do distractions or relaxation, but it is not measured how much influence the technique has in reducing pain. Some patients do not understand what is called distraction or relaxation. Based on the aforementioned background description, researchers are interested in researching the difference between distraction and relaxation techniques in reducing the intensity of pain during surgical wound care.

## 2. Method

### 2.1. Research Design

The research design used is quasi-experiment.

### 2.2. Population and Sample

The population in this study was all postoperative patients who experienced complaints of pain at daerah Gunungsitoli General Hospital. The total population in this study was calculated from the average number of surgical patients per month as many as 65 people. After the study was carried out so that a sample of 30 people was obtained.

### 2.3. Analysis Techniques

To find out if there is a difference in the intensity of pain in the client's surgical wound, it is

used with the help of statistical computing with mini tab software. The measurement data is ordinal data and the distribution does not follow the normal distribution, so the analysis used is a non-parametric analysis. To analyze the effect of distraction or relaxation techniques on changes in pain intensity during wound treatment, wilcoxon test was used, while to analyze the differences in pain intensity changes during wound treatment between respondents who used distraction techniques and relaxation used the Mann Whitney test (Iriany et al, 2013).

### 3. Results and Discussion

TABLE 1  
ANALYSIS OF CHANGES IN PAIN INTENSITY DURING WOUND TREATMENT  
AFTER USING DISTRACTION TECHNIQUES

Pain Intensity	Before distraction				Amount
	Mild Pain	Moderate pain	Great Pain	Very Great Pain	
After dis- traction	Very Great Pain	-	-	-	-
	Great Pain	-	-	-	-
	Moderate pain	-	1	1	2(13%)
	Mild Pain	4	8	1	13(87%)
Amount	4 (27%)	9 (60%)	2 (13%)	-	15

pValue = 0,001

Based on table 1 above, it is known that changes in the intensity of pain after using distraction techniques. Respondents who were mild pain remained mild pain, whose moderate pain decreased to mild pain 8 and remained moderate pain 1. Those with severe pain have decreased to moderate pain 1 and mild pain 1, from the results of statistical tests using the Wilcoxon Signed Rank test, get a p-value <  $\alpha$ , meaning that by using distraction techniques during wound treatment, the intensity of the pain has changed. Before using distraction or relaxation techniques during wound treatment, respondents who experienced mild pain 23%, moderate pain 67% and severe pain 10%. The pain arises because there is stimulation in the damaged tissue in the wound area in the form of friction of objects or gauze when the wound is cleaned and pressed.

TABLE 2  
ANALYSIS OF CHANGES IN PAIN INTENSITY DURING WOUND TREATMENT AFTER USING  
RELAXATION TECHNIQUES

Pain Intensity	Before distraction				Amount
	Mild Pain	Moderate pain	Nyeri Hebat	Mild Pain	
After dis- traction	Very Great Pain	-	-	-	-
	Great Pain	-	-	-	-
	Moderate pain	-	3	1	4(27%)
	Mild Pain	3	8	-	11(73%)
Amount		11 (73%)	1 (7%)	-	15

pValue = 0,001

Based on table 2 above, it explains the changes in pain intensity after using relaxation techniques. Respondents whose mild pain remained mild pain 3, whose moderate pain decreased to mild pain 8 and remained severe pain decreased to moderate pain 1. From the results of statistical tests using the Wilcoxon Signed Rank test, p-value <  $\alpha$  was obtained, meaning that by using relaxation techniques during wound treatment, the pain intensity has changed.

After the distraction technique, changes were obtained, namely a decrease in pain intensity from 27% mild pain, 60% moderate pain, 13% severe pain, to 87% mild pain and 13% moderate pain. The criteria for the decrease are slightly reduced by 7%, moderately reduced by 47%, reduced more moderate by 33% and greatly reduced by 13%. This shows that all respondents experienced a decrease in pain intensity and varied. This situation corresponds to the statement of Delaune, Ladner (2008), who mentions that a person who is less aware of the presence of pain or pays little attention to pain, will be slightly disturbed by pain and more tolerant. And further put forward the theory that distractions can decrease pain perception by stimulating the concentration control system, resulting in fewer pain stimuli being passed on to the brain.

TABLE 2  
ANALYSIS OF DIFFERENCES IN PAIN INTENSITY CHANGES DURING WOUND TREATMENT  
BETWEEN THE USE OF DISTRACTION AND RELAXATION TECHNIQUES

Technique	Decreased pain intensity				N	Median
	Slightly reduced	Less moderate	Less moderate	Greatly reduced		
Distraction	1 (7%)	7 (47%)	5 (33%)	2 (13%)	15	2,000
Relaxation	9 (60%)	4 (27%)	2 (13%)	0	15	1,000

The test signifikan = 0,0014

Based on table 3 above, it is explained that there is a difference in the intensity of pain during wound treatment between using distraction and relaxation techniques. By using distraction techniques, a large decrease in pain intensity was reduced moderately (47%) and more moderately (33%), while by using distraction techniques, the most decrease in pain intensity was slightly reduced (60%) while reduced moderately (27%) and more moderately (13%).

The results of the statistical test using the mann whitney test obtained a confidence value of 0.0014 smaller than  $\alpha = 0.005$  and a distraction technique > relaxation. So it can be concluded that  $H_0$  is rejected, meaning that there is a difference in the intensity of pain during wound treatment between the use of distraction and relaxation techniques, where distraction techniques are greater in reducing pain when compared to relaxation techniques. The results of the statistical test using the Mann Whitney test obtained a confidence value of 0.0014  $\alpha = 0.05$  so that the p value <  $\alpha$  and the technique of distraction > relaxation, it was concluded that  $H_0$  was rejected meaning that there was a difference in the intensity of pain during wound treatment between using distraction and relaxation techniques, where the distraction technique was greater in reducing pain intensity when compared to relaxation techniques.

The results of the analysis found that there was a difference in the manual reduction in pain intensity, namely by using distraction techniques during wound treatment, most of them were reduced moderately (47%) and a small part was slightly reduced (7%), while by using relaxation techniques most of the changes were slightly reduced (60%) and a small part was reduced moderately, (13%). This situation shows that the use of distraction techniques during wound treatment decreases the intensity of pain more when compared to the use of relaxation techniques. The emergence of this gap is due to the ability of respondents who use different distraction and relaxation techniques. From observations during wound care, respondents who used distraction techniques could do well while respondents who used relaxation techniques needed guidance. Respondents who used distraction techniques were able to turn their attention to other objects and pay little attention to pain stimuli, so that the inten .

#### 4. Conclusion

Based on table 3 above, it is explained that there is a difference in the intensity of pain during wound treatment between using distraction and relaxation techniques. By using distraction techniques, a large decrease in pain intensity was reduced moderately (47%) and more moderately (33%), while by using distraction techniques, the most decrease in pain intensity was slightly reduced (60%) while reduced moderately (27%) and more moderately (13%).

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