

EFFECT OF HYPNOPRESSURE ON PAIN RELIEF IN POST-SURGERY PATIENTS AT UNIVERSITAS SEBELAS MARET HOSPITAL

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ABSTRACT

Background: Pain is a major problem among postoperative patients. In addition to pharmacological therapy, a complementary treatment may help relieve pain. Hypno-pressure is a nursing action consisting of hypnotherapy and acupressure that has the potential to reduce pain. This study aimed to determine the effectiveness of hypno-pressure on pain relief among postoperative patients.

Subjects and Method: This was a one group pre and post with no control group quasi-experimental study conducted at Universitas Sebelas Maret Hospital. A sample of 16 post-surgery patients were selected for this study. The dependent variable was pain. The independent variable was hypno-pressure. Pain was measured by visual analog scale (VAS). Mean difference before and after intervention was tested by paired t-test.

Results: Mean score of pain after intervention (Mean= 2.38; SD= 0.50) was lower than before intervention (Mean= 5.44; SD= 1.09), and it was statistically significant ($p < 0.001$).

Conclusion: Hypno-pressure is effective in reducing pain among post-surgery patients.

Keywords: pain, hypno-pressure, post-surgery.

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BACKGROUND

Surgery is a form of medical therapy and can also cause damage to the integrity of the body. According to Syuhada and Pranatha (2017) in their research, the acupressure technique reduced the pain scale in postoperative sectio caesarea patients.

Pain after surgery occurs due to tissue damage or noxious stimuli. Noxious stimuli are caused by inflammation so that inflammatory cells will come out and be received by pain receptors called nociceptors. These receptors are directly related to free

nerve endings, which generally consist of two types, namely delta-A fibers and type C. 2 These fibers then go to the spinal cord and head to the brain via two main routes, namely the spinothalamic pathway and the spinoreticular pathway. Fast pain messages consist of A-delta fibers which have myelin and are then forwarded through the spinothalamic tract to specific locations in the brain, namely the thalamus and forwarded to the cerebral cortex. This pain message quickly reaches the cortex, can localize pain. In contrast, pain traveling along slow pathways

consists of type C fibers. Slow pain messages travel via the spinothalamic tract. The spinothalamic tract has branches to the reticular formation and the limbic system. The reticular formation is responsible for regulating awareness, while the limbic system is responsible for processing emotions so that it will have an emotional influence on pain perception (Wiguna et al., 2020).

One of the complementary therapies in hypno-breastfeeding research is able to make you feel relaxed, comfortable and calm during breastfeeding so that the whole system in your body will run much more perfectly, so the breastfeeding process becomes a meaningful and enjoyable process for both you and for your baby (Adi and Saelan, 2018). Hypnopressure provides a sedative and relaxing effect that changes beta brain waves to theta or gamma (subconscious state). During theta or gamma brain waves, the brain produces the hormone serotonin, endorphins and increases parasympathetic nerve activity in the body to make it more comfortable and increase self-confidence through suggestions given when doing hypnopressure (Anuhgera and Simbiring, 2021). In connection with the issuance of the regulation of the Minister of Health of the Republic of Indonesia number HK.02.02/MENKES/148/1/-2010 concerning licenses and administration of nurse practice, complementary therapy can be carried out in health care facilities. Complementary therapies that can be applied in clinics include health acupuncture, aromatherapy, relaxation therapy, herbal therapy and hypnotherapy (Wibowo, 2014).

Hypnotherapy will provide a stimulus to the subconscious mind, namely in the alpha to theta waves, this mind is the opposite of the conscious mind or conscious mind. The conscious mind is a mind that we use every day filled with analysis, thought processes and judgments. The subconscious mind should work without analysis like a large warehouse that stores emotions, memories, personality, intuition, perceptions, beliefs about things and habits (Handayani, 2018). In research on hypnotherapy, the results showed that there was an effect of hypnotherapy on reducing the pain intensity of postoperative patients (Sumarwanto, 2015).

Another complementary therapy is acupuncture, this intervention is a traditional Chinese medicine in which very thin needles are inserted into the body at specified points. One of these therapies is to reduce pain (Lewis et al., 2019).

Acupressure provides stimulation by using the fingers on the body's meridian points which aim to affect certain organs of the body by stimulating the body's energy flow. The benefits of acupressure can help manage stress and increase relaxation. Emphasis is done slowly until meridian points are found, namely conditions where the body feels discomfort, pain, aches, heat and itching (Setyowati, 2014). Based on the phenomenon above, the researcher wants to take the title of research on the effect of hypnopressure on pain in postoperative patients at UNS Hospital.

SUBJECTS AND METHOD

1. Design Study

This was a one group pre and post with no control group quasi-experimental study conducted at Universitas Sebelas Maret Hospital from September to October 2022 at the UNS Solo Hospital.

2. Population and Samples

The number of samples in the study were 16 subjects. The intervention was carried out in the morning for 1 time for 15 minutes. The data collection technique used in this study was purposive sampling.

3. Study Variables

The dependent variable in this study is pain. The independent variable in this study is hypnpressure.

4. Definition Operational of Variables

Providing independent nursing therapy with hypnpressure intervention, namely therapy by applying pressure to certain points and therapy that uses the power of suggestion and the power of thought which will change brain waves into alpha and theta conditions so that the patient's condition is immediately relaxed and the patient can become more comfortable in a relatively short time.

Pain was a feeling of discomfort experienced by postoperative femoral fracture patients after obtaining pain comfort needs met with comfort technical interventions music therapy and deep breathing relaxation physically as described in the VAS pain scale.

5. Study Instrument

The research instrument in this study was in the form of an observation sheet which included the characteristics of the subject and to measure the level of comfort (pain) using the VAS.

6. Data Analysis

This data analysis was carried out to determine the difference in the mean before and after the intervention. The test used is the paired t-test. This study used the analysis technique of IBM SPSS Statistics version 17 for windows.

7. Research Ethics

The confidentiality of the information provided by the subject is guaranteed by the researcher because only certain data groups will be presented or reported as research results or results from research.

RESULTS

The following is data from the subject's general description including age, gender, pain level before and after hypnosis.

a. Subject Characteristics

Table 1 shows that the average age of the research subjects was 24 years with a range ranging from 19 years to 34 years.

Table 2 shows that the majority of research subjects were 12 (75%) women.

Table 3 shows that the mean pain score after the intervention (Mean= 2.38; SD= 0.50) was lower than before the intervention (Mean= 5.44; SD= 1.09), and was statistically significant ($p < 0.001$).

Table 1. Subject characteristics by age

Variable	Mean	Min.	Max.
Age (years)	24	19	34

Table 2. Subject characteristics based on gender

Gender	Frequency (n)	Percentage (%)
Male	4	25
Female	12	75

Table 3. Results of the paired t-test before and after hypnosis

Hipnopresure	Mean	SD	Min.	Max.	p
Pre	5.44	1.09	4	8	<0.001
Post	2.38	0.5	2	3	

DISCUSSION

The majority of subjects in the study were on average 24 years old. This is in accordance with Sumarwanto's study (2015) that the most ages experiencing pain in the study were subjects aged 17-25 years with a total of 11 subjects with a percentage of 68.8%. According to Lubis and Sitepu (2021) this age group is a product age group that is prone to experiencing pain due to activity and high mobility. This is contrary to several studies which state that the intensity of pain is different for gender and age level. Women are considered to have low pain tolerance, so they are very vulnerable to experiencing more severe pain than men, while young people will experience more severe pain than old age (Wiguna et al., 2020).

The majority of subjects in this study were 12 (75%) women. This is in line with the research of Wibowo and Istiqomah (2014) that the pain felt by the subject varies from one individual to another which can be influenced by gender and age. This is in accordance with the theory which states that the factors that influence a person's response to pain are gender and age. Women are often associated with cultural aspects that women and men respond differently to pain, culture affects expression in each individual

responding to pain with different responses, for example women are allowed to cry as normal and vice versa when men experience pain (Wibowo and Istiqomah, 2014).

This study showed that the mean pain score after the intervention (Mean= 2.38; SD= 0.50) was lower than before the intervention (Mean= 5.44; SD= 1.09), and was statistically significant (p <0.001). Pain after surgery normally lasts only a limited duration, less than the time required for the natural repair of damaged tissues. After the subject is given the acupresure technique for 10-15 minutes, measurement is immediately carried out by means of the subject indicating the number of pain on the written questionnaire using a numerical pain scale (0-10) that the intensity of pain felt by the subject after being given the acupresure technique has decreased, namely subjects who experienced mild pain as many as 5 (22.7%) people, moderate pain as many as 17 (77.3%) people. These results indicate that the decrease in the pain intensity value for each individual is different even though the stimulus that causes pain and the treatment given is the same, this is because a person's pain can be influenced by several factors including age, gender, culture, knowledge about pain and its causes, meaning pain,

client attention, anxiety level, stress level, energy level, previous experiences, coping patterns, family and social support (Abdillah and Meni, 2020).

This study shows that the pain scale of postoperative patients after hypno-pressure was obtained on average 2.38. The results of this study are in accordance with Khasanah and Astuti (2015) acupressure therapy is effective in reducing the intensity of dysmenorrhea pain in young women with a decrease in pain of 1.47 and obtained $p < 0.001$. While Hypnotherapy therapy is to give positive suggestions or orders to the subconscious mind to cure a psychological disorder or to change thoughts, feelings, and behavior for the better. Hypnotherapy can also be used to relieve pain, improve breathing, and treat digestive disorders. With hypnotherapy, you can increase the levels of endorphins in the body. The results showed that the intensity of pain before and after being given acupressure therapy was that all pain intensity experienced by the subject decreased with different value/scale of reduction, namely slightly reduced, moderately reduced, and high reduced. After the paired-sample t-test statistical test was carried out, the results obtained were $p < 0.001$, meaning that acupressure therapy was effective in minimizing primary dysmenorrhea in young adult women. Another therapy that can overcome dysmenorrhea in young women is hypnotherapy.

Hypnotherapy is a method of instilling suggestions when the brain is in a relaxed state, but that doesn't mean you are asleep or unconscious

while practicing hypnotherapy. It can also be said to be a mind therapy and healing technique that uses hypnotic methods to give positive suggestions or commands to the subconscious mind for healing a psychological disorder or to change thoughts, feelings, and behavior for the better. Hypnotherapy can also be used to relieve pain, improve breathing, and treat digestive disorders. With hypnotherapy, you can increase the levels of endorphins in the body. Endorphin is a neuropeptide that the body produces when relaxed or calm (Khasanah and Astuti, 2015).

In this study, hypnotherapy was effective in reducing dysmenorrhea in young women with a reduction in pain of 2.42. The results of the Wilcoxon test analysis in table 5 show that there is an effect of hypnopressure on pain in postoperative patients at UNS Hospital. This is consistent with research on hypnopressure in obstetrics by planning a physiological delivery without psychological disturbances such as excessive anxiety, and can shorten the duration of labor. The results of this study prove that hypnopressure interventions for mothers in the first active phase of labor are effective in shortening the duration of labor compared to hypno-audio interventions, acupressure and deep breathing. This is supported by the mean length of the first active phase of labor calculated in minutes which has a long duration. the fastest delivery was in the HP group (113.00), then the next sequence was the HA group (141.25), followed by the AK group (186.75), and in group K (193.25) (Fitrianingsih et al., 2022).

According to Soylu and Kartın (2021) the results of this study show

that acupressure applied to acupuncture points improves bowel sounds and arosopic cholecystectomy surgery reduces pain. Comparison of the levels of menstrual pain (dysmenorrhea) before and after hypnotherapy for young women, the effect of hypnotherapy on dysmenorrhea, and differences and comparisons of menstrual pain levels before and after hypnotherapy (Mulyani and Zahara, 2021). Whereas in a study entitled patients who underwent reiki intervention and with acupressure therapy decreased pain levels, increased comfort levels and the Reiki application was more effective in increasing comfort levels compared to acupressure applications (Topdemir and Saritas, 2021).

The limitation of this research is when the data collection is small, the research time is limited because all researchers work. The conclusion of this study is that there is an effect of hypnopressure on pain in postoperative patients at UNS Hospital. Suggestions from this study are that other researchers should be able to develop this research, for example by conducting research using different variables such as adding variables and a larger number of research samples and can be used as material for consideration in the management of non-pharmacological pain management using hypnotherapy and acupressure after undergoing surgery.

AUTHOR CONTRIBUTION

Saelan and Diah Laras pramesti wrote this article and analyzed the data. Aria Nurahman Hendra Kusuma and Lalu M. Panji Azali reviewed and interpreted the research results.

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CONFLICT OF INTEREST

There is no conflict interest.

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