

THE EFFECT OF HYPNOSIS THERAPY ON THE PAIN SCALE OF POST OPERATIVE PATIENTS: LITERATURE REVIEW

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ABSTRACT

Background: Acute pain is a sensory or emotional experience associated with actual or functional tissue damage, with a sudden or slow onset and of mild to severe intensity lasting less than 3 months. Surgical procedures can cause acute pain. The main outcome of nursing interventions related to acute pain is a decrease in the level of pain. One of the non-pharmacologic nursing therapeutic interventions that can reduce pain levels and increase comfort is hypnosis therapy. **Purpose:** To determine the effect of hypnotherapy on pain scale in postoperative patients. **Methods:** Scientific articles in English and full texts published in 2002-2020 were identified and then analyzed by PI(E)O (problem; intervention; exposure; comparison; outcome). A total of 3404 articles from the PubMed, Wiley, Science Direct, and Google Scholar databases were identified using the keywords "hypnotherapy" OR "pain". **Results:** The results of the study found articles that discussed the effect of hypnotherapy on the pain scale. **Conclusion:** Patients who are given hypnosis will feel relaxed and make their subconscious active so that they can easily accept suggestions and can ignore other stimuli, including pain stimuli. Further research should also be carried out in patients who experience chronic pain.

Keywords: hypnosis therapy, pain, patient.

INTRODUCTION

Acute pain seriously threatens the client's recovery after surgery so that it hampers the client's ability to be actively involved in mobilization, rehabilitation, and hospitalization for a long time (A Potter and Perry, 2006). Postoperative pain can cause mortality and morbidity up to the 30th postoperative day. The treatment of postoperative pain can increase continued use and abuse of opioids. Surgery causes persistent pain in certain cases (Timothy J and James C, 2018). There are two ways to reduce pain, namely pharmacological and non-pharmacological. Non-pharmacological management consists of various pain management actions based on physical stimulation and cognitive behavior. Cognitive interventions include distraction, relaxation, guided imagination, biological feedback, hypnosis, and therapeutic touch.

Research on the effect of hypnotherapy on the pain scale of postoperative patients is very interesting because there are very few hospitals that apply this hypnotherapy procedure to postoperative patients in Indonesia, even though it is permissible by law.

According to Andi Taqwa (2008), hypnosis is a medical knowledge that was previously neglected but is now actively used in pain management. In the management of short medical procedures that cause anxiety and pain, hypnotherapy is used as an additional therapy. This hypnosis technique works on perception and modulation of pain pathophysiology. Numerous studies have been conducted to evaluate the impact of hypnosis in reducing anxiety levels, pain, procedure duration, hospital stay duration, costs, and side effects.

Efforts have been made to treat pain in appendectomy patients, one of them by Utami and Khoiriyah (2020), who stated that giving lemon aromatherapy can reduce the pain scale in post-operative appendectomy patients. While research (Utami, 2014) states the effectiveness of deep breathing relaxation and distraction with 5 finger exercises is effective for reducing pain after appendectomy. The research by Hamonangan Damanik, Sarida Surya Manurung, and Deddy Sepadha Putra Sagala (2022) indicates

that back massage has an impact on reducing pain levels in patients after appendectomy surgery.

The research (Wahyudi, 2019) states that five-finger auditory hypnosis as a relaxation technique can have a positive influence on the respondent's vital signs which include systolic, diastolic blood pressure, pulse frequency, breathing frequency and pain. Based on the phenomena described above, the authors are interested in conducting a literature review to clearly describe the effect of hypnotherapy on pain. Hypnotherapy is a complementary nursing intervention that is rarely used to address pain caused by invasive procedures in hospitals. Therefore, the author is interested in conducting a literature review regarding the application of hypnotherapy for such patients.

METHOD

Literature Search Strategy

Scientific articles in English and full text published in 2016-2020 were identified for later analysis with PI(E)O (problem; intervention; exposure; comparison; outcome). A total of 3404 articles from the PubMed, Wiley, Science Direct, and Google Scholar databases were identified using the keywords "hypnotherapy" OR "pain". Scientific articles with quasi-experimental and randomized control trials were chosen to be relevant to the research question. Table 1 contains 7 scientific articles selected by the authors related to the effect of hypnosis therapy on the pain scale of postoperative patients.

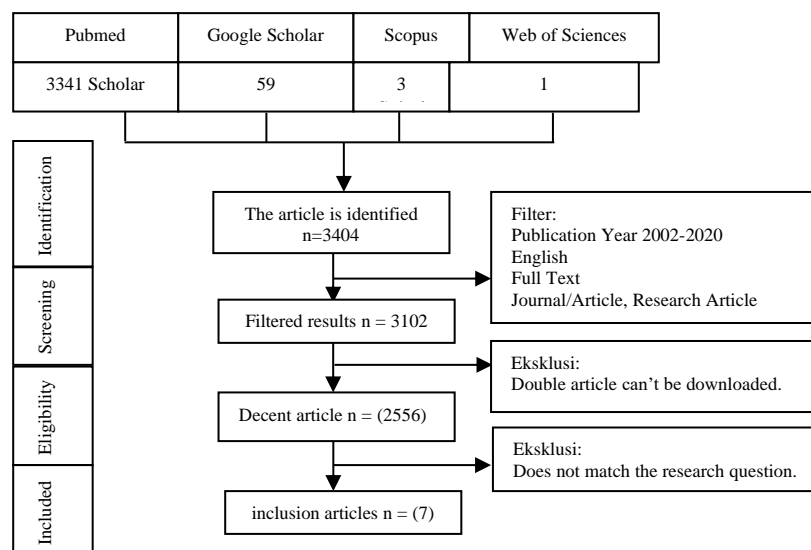


Figure 1. Article Search Algorithm

Table 1. Synthesis Grid

Author/ Year	Research Title	Research Purposes	Research Design	Research Sample	Variables and Instruments	Research Result
Suryanti, Yanti (2019)	The Effect of Hypnotherapy on Pain Scale in Post Cardiac Catheterization Patients in the Icvcu Room of RSud Dr. Moewardi	Knowing Is There the Effect of Giving Hypnotherapy To The Pain Scale In Patients After Cardiac Catheterization In The ICVCU Room, RSUD Dr. Moewardi	Quasi-experimental research design with one group pretest-posttest design	As many as 30 respondents Post Coronary Angiography with non-probability sampling technique sampling means by accidental sampling.	The research instrument was the Numerical Rating Scale (NRS).	Giving hypnotherapy therapy to respondents after cardiac catheterization had a significant effect on reducing the pain scale felt by respondents in the ICVCU room at Dr Moewardi Hospital with a p-value of 0.001
Iva Gamar Dian Pratiwi, Laylatul Hasanah (2020)	Spiritual Effectiveness of Hypnotherapy on Reducing Dysmenorrhea Pain in Midwifery Students	Analyze the spiritual effectiveness of hypnotherapy to reduce dysmenorrhea.	Pre-experimental quantitative research with a cross sectional approach. The research design used was one group pretest and posttest.	The number of samples is 30 respondents. The sampling technique used was purposive sampling which matched the inclusion criteria.	Visual Analog Scale (VAS) pain assessment questionnaire with Numeric Rating Scale (NRS)	The results of data analysis with the Wilcoxon signed rank test showed p = 0.000 < 0.005, it can be concluded that spiritual hypnotherapy is effective in reducing dysmenorrhea pain in midwifery students.
Samsugito, (2020)	The Effect of Hypnosis in Reducing Pain during Wound Treatment at A. Wahab Sjahranie Hospital Samarinda	This study aims to determine the effect of hypnosis in reducing pain during wound care in hospitals. A. Wahab Sjahranie Samarinda	Quasi-experimental method with one group pre-post-test design without control (the one group pre-post-test design)	Population of 16 respondents, sampling technique with consecutive sampling based on the established research criteria	Pain scale is measured by using the Numerical Pain Rating Scale (NRS)	The most pain in patients with wounds after surgery before being hypnotized was 56.25% moderate pain, whereas after being hypnotized most of the mild pain was 93.75%. There is a difference in pain scale based on the Wilcoxon test after surgery before and after being hypnotized with a p value of 0.000 < 0.005. There is a significant difference in the patient's pain during wound care before and after being hypnotized

Continuation of Table 1. Synthesis Grid

Author/Year	Research Title	Research Purposes	Research Design	Research Sample	Variables and Instruments	Research Result
A. Steel, J. Frawley, D. Sibbritt, A. Broom, J. Adams (2016)	The characteristics of women who use hypnotherapy for intrapartum pain management: Preliminary insights from a nationally representative sample of Australian women.	To determine the characteristics of women who used hypnobirthing as intrapartum pain management, Fisher exact tests were used to compare categorical variables.	Cross-sectional analysis of 2445 women (31–36 years) from a sub-study of the Australian Longitudinal Study on Women’s Health (ALSWH), employing Fisher exact tests.	2445 women (31–36 years) from a sub-study of the Australian Longitudinal Study on Women’s Health (ALSWH).	Use of intrapartum hypnosis, or hypnobirthing, for pain management during labor and birth.	Women who use hypnobirthing are more likely to have consulted an acupuncturist or naturopath and practiced yoga/meditation during their pregnancy. ($p < 0.0001$). Use of CM products such as herbal medicines, aromatherapy oils, homeopathy, herbal teas or flower essences ($p < 0.001$) was also more common amongst these women. Women feel more confident with therapy from a gynecologist than hypnotherapy ($p < 0.001$) and were more likely to labor in a birth center or in a community center (i.e., at home).
J. Lebon, M. Rongie, C. Apredoaei, S. Delclaux, P. Mansat (2016)	Physical therapy under hypnosis for the treatment of patients with type I complex regional pain syndrome of the hand and wrist: Retrospective study of 20 cases.	To evaluate the effectiveness of physical therapy under hypnotherapy to treat this condition.	Retrospective study of data collected prospectively and continuously in the orthopedic and trauma surgery department of a French university hospital.	Between May 1, 2014, and April 30, 2015, all patients with CRPS-I of the hand and/or wrist were included in the study, no matter the etiology, time elapsed before treatment, prior Treatments, and disease phase (acute inflammatory, dystrophic, atrophic).	The quantitative variables were described with means and standard deviations (along with median and minimum, maximum), since the distribution of the quantitative variables met the normality assumptions.	Satisfactory average result of 5.4 sessions. VAS decreased by 4 points. PWRE of pain was 4.1 points. Paracetamol is used on a limited basis upon request. The range of motion of the fingers and hands is increased. Quick DASH is reduced by 34 points. PWRE function of 3.8 points. pinching power increased by 4 points. grip strength 10 points. As many as 80% of Cases can return to work. All patients were satisfied and very satisfied with the treatment. Physical therapy under hypnosis is very effective for CRPS-1 in the hand area for any cause.

RESULT

The results of the literature study were obtained by Suryanti, Yanti (2019). Giving hypnotherapy therapy to respondents after cardiac catheterization had a significant effect on reducing the pain scale felt by respondents in the Intensive Cardiovascular Care Unit (ICVCU) room of Dr. Moewardi Hospital with a p-value of 0.001. In the research of Pratiwi and Hasanah, (2020) with a total of 30 respondents, the results obtained $p = 0.000 < 0.005$ reveal that it can be concluded that spiritual hypnotherapy is effective in reducing dysmenorrhea pain in midwifery students. In the Samsugito study (2020) with 16 respondents, the results of the pain of patients with wounds after surgery before being hypnotized were 56.25% moderate pain, while after being hypnotized most of the mild pain was 93.75%. There was a difference in the pain scale of patients after surgery before and after being

hypnotized with a p value of $0.000 < 0.005$ (Wilcoxon test).

Similarly, in the study of Steel, et al (2016), women who use hypnobirthing are more likely to have consulted an acupuncturist or naturopath and practiced yoga/meditation during their pregnancy ($p < 0.0001$). Use of CM products such as herbal medicines, aromatherapy oils, homeopathy, herbal teas, or flower essences ($p < 0.001$) was also more common amongst these women. women feel more confident with therapy from a gynecologist than hypnotherapy ($p < 0.001$) and were more likely to labor in a birth center or in a community center (i.e., at home). In research Lebon *et al.* (2017) showed a satisfactory average result of 5.4 sessions. VAS decreased by 4 points. PWRE of pain was 4.1 points. Paracetamol is used on a limited basis upon request. The range of motion of the fingers and hands is increased. Quick DASH is reduced by 34 points. PWRE function of 3.8 points.

pinching power increased by 4 points. grip strength 10 points. As many as 80% of cases can return to work. All patients were satisfied and very satisfied with the treatment. Physical therapy under hypnosis is very effective for CRPS-1 in the hand area for any cause.

DISCUSSION

Giving hypnotherapy to post-cardiac catheterization patients has a significant effect on the pain scale (Suryanti, 2019). This is supported by the results of the study (Samsugito, 2020) concluded that there is a significant difference patients' pain during wound care before and after hypnotized.

There are differences in the pain scale of patients after surgery before and after being hypnotized (Samsugito, 2020). This is supported by research results (Marwati, Rokayah, and Herawati, 2020) which show that there is an effect of Progressive Muscle Relaxation on caesarean post section patients at RSKIA Bandung City.

Women choose hypnotherapy for intrapartum pain management (Steel *et al.*, 2016). This is supported by the results of research Juistirai (2020) which states that there is an effect of relaxation therapy (deep breathing) in reducing labor pain.

Physical therapy under hypnosis is very effective for CRPS-1 in the hand area for any cause (Lebon *et al.*, 2016). This is supported by research results (Taylor, 2019) which state that hypnotherapy is able to reduce pain levels and increase comfort so that the quality of life will be better compared to psychological therapy and other conventional treatments.

CONCLUSION

Hypnotherapy is a therapeutic method using hypnosis, which makes the patient feel relaxed and his subconscious mind is active so that it is easy to accept suggestions and ignore other responses. Further research should also be carried out in patients who experience chronic pain.

SUGGESTIONS

Further research on the effectiveness of hypnotherapy in managing patients' pain can provide additional insights for therapists and the community. Research involving a wider and diverse group of patients can also provide more comprehensive information about the use of hypnotherapy in the context of pain treatment.

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CONFLICT OF INTEREST

The author has no conflict of interest.

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AUTHOR CONTRIBUTION

Author Rangga Wasita is responsible for data collection, data analysis, manuscript writing, literature review, reference. Author Yuli Peristiowati is responsible for study design, data collection and supervision, data analysis, manuscript revision. Author Agusta Dian Ellina is responsible for study design, data collection and supervision, data analysis, and manuscript revision. Author Asruria Sani Fajriyah is responsible for study design, data collection and supervision, data analysis, manuscript revision.

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