



The Effect Of 5-Finger Hypnosis Therapy on Reducing Anxiety Levels in Preoperative Patients in The Surgical Clusterisation Inpatient Room of The Workers' General Hospital

Mahyar Suara^{1*}

¹ STIKES Abdi Nusantara Jakarta, Indonesia.

Received: January 13, 2025

Revised: March 17, 2025

Accepted: May 25, 2025

Published: May 31, 2025

Corresponding Author:

Mahyar Suara

mahyarsuara028@gmail.com

DOI: [10.29303/jppipa.v11i5.11381](https://doi.org/10.29303/jppipa.v11i5.11381)

© 2025 The Authors. This open access article is distributed under a (CC-BY License)



Abstract: Surgery is a treatment method that uses invasive techniques, by making an incision to open and display the part of the body to be treated, then closing the wound with a suturing process. The impact of surgery can cause various psychological problems in patients, one of which is anxiety. Therapy to reduce anxiety is five-finger hypnosis therapy, a self-hypnosis method that can provide a high relaxation effect, thereby helping reduce tension and stress in the mind. The aim of this study was to determine the effect of providing 5 finger hypnosis therapy on reducing anxiety levels in pre-operative patients in the Clustered Surgical Inpatient Room at the Workers' General Hospital. This type of research is quantitative descriptive research. This research uses a quasy experiment with a pre- post approach without control. The sample used with respondents was 18 respondents. The research instrument used in this research was the HARS questionnaire which the author created and provided closed questions. Data collection was carried out using primary data. Data analysis uses univariate analysis and bivariate analysis. The results of the paired t-test statistical test show the p value = 0.000, meaning the p value < alpha value (0.05), thus the decision is that Ho is rejected and Ha is accepted. The conclusion is "There is a significant effect of 5 finger hypnosis therapy on reducing anxiety levels in pre-operative patients in the Clustered Surgical Inpatient Room at the Workers' General Hospital. Thus, 5 finger hypnosis therapy needs to be applied to pre-operative patients so that anxiety can be reduced.

Keywords: Anxiety; Finger-held hypnosis; Pre-surgery.

Introduction

Digital mathematics the industrial revolution era created major changes in the way goods were produced, marked by the development of technology and mechanization (Musarat et al., 2023; Rijwani et al., 2025). Some of the industries that have developed to date are the Internet of Things industry (technology that allows devices to connect and communicate with each other via the internet). Renewable energy industry (the shift to energy sources such as solar, wind, and batteries to support sustainability). Biotechnology industry (developments in genetic technology, biomolecular

engineering, and advanced pharmaceuticals). Artificial Intelligence (AI) industry AI applications in various fields such as healthcare, autonomous transport, and smart manufacturing, hospitals (Rondonuwu & Mandagi, 2023).

Hospitals are health care institutions that provide comprehensive individual health services, including inpatient, outpatient, and emergency services (Ala & Chen, 2022). One of the medical procedures performed in hospitals is surgery. Surgery is a method of treatment that uses invasive techniques, by making an incision to open and display the body part to be treated, then

How to Cite:

Suara, M. (2025). The Effect Of 5-Finger Hypnosis Therapy on Reducing Anxiety Levels in Preoperative Patients in The Surgical Clusterisation Inpatient Room of The Workers' General Hospital. *Jurnal Penelitian Pendidikan IPA*, 11(5), 684-691. <https://doi.org/10.29303/jppipa.v11i5.11381>

closing the wound with a suturing process (Swindle et al., 2021).

More than a century, surgical care has been an important part of health services worldwide. Every year there are an estimated 284 million surgical procedures performed worldwide. Based on the national tabulation data of the Indonesian Ministry of Health (2023) shows that the prevalence of surgery throughout Indonesia is around 1.9 million cases, which consists of surgical procedures occupying the 11th position of the 50 common diseases in Indonesia, with a percentage of 12.8%. Of these, about 32% were major surgeries, with 25.1% of patients experiencing mental disorders, and 7% experiencing anxiety. While the prevalence that occurred in DKI Jakarta in 2023 there were 275,000 operations in hospitals throughout DKI Jakarta.

Anxiety in per-operative patients includes concerns about postoperative pain, physical changes, possible surgical failure, and the risk of death after surgery (Suhadi & Pratiwi, 2020). More than two-thirds of patients awaiting surgery experience anxiety, and each patient's level of anxiety is influenced by experience and various other factors, as this anxiety often arises as a natural response that cannot be predicted, especially for patients facing surgery for the first time (Sandra et al., 2023).

The presence of severe anxiety in pre-operative patients can result in surgical procedures having to be postponed, because increased blood pressure due to anxiety can make it difficult to stop bleeding during surgery, and even affect postoperative conditions (Obeagu, 2025). Pharmacological treatment can be with anti-anxiety drugs such as benzodiazepines which are recommended for short-term treatment of severe anxiety, but their long-term use should be avoided. Some types of benzodiazepines such as diazepam, alprazolam, chlordiazepoxid, and klobazam have a slow-acting effect (Rondonuwu & Mandagi, 2023).

There are many non-pharmacological ways to reduce anxiety levels. Hypnosis therapy with five fingers is a self-hypnosis method that can provide a high relaxation effect, thus helping to reduce tension and stress on the mind (Aminah et al., 2023). This method works by creating a state of relaxation that lowers anxiety, tension, and stress, and affects breathing, heart rate, pulse, blood pressure, reduces muscle tension, and regulates stress-related hormones that can trigger anxiety (Hardianti & Akhriansyah, 2022).

Previous research by Wairata (2024) at Gondo Suwarno Ungaran Hospital, on the effect of deep breath relaxation with five-finger hypnosis therapy on pre-operative anxiety showed that the level of anxiety before therapy, measured using a questionnaire, was at a moderate level of 61.3%. After being given deep breath

relaxation therapy and five-finger hypnosis, the anxiety level was reduced to mild anxiety in 83.9% of respondents, with statistical tests obtained p-value <0.05 (0.000).

Previous research by Hartono et al. (2021) & Pardede et al. (2018) showed that anxiety levels in pre-operative patients decreased after being given five-finger hypnosis therapy. The results of the study revealed that before the intervention, the majority of respondents (88.9%) experienced moderate anxiety. After the intervention and measured by a questionnaire, the anxiety level of the majority of respondents decreased to mild anxiety in 59.3% of patients who felt anxious pejoratively.

Based on a preliminary study, conducted by researchers on patients undergoing surgery in October 2024. From interviews and observations of 10 pre-operative patients, it was found that 0.3% of patients experienced mild anxiety, 0.2% of patients experienced moderate anxiety, and 0.5% of patients experienced severe anxiety. The results of interviews with the head of the room and nurses at the Jakarta Workers Hospital revealed that anxiety levels had never been measured in preoperative patients, so their anxiety levels were unknown. If there are patients who feel anxious, the action taken is the administration of pharmacological or anti-anxiety drugs and there are no non-pharmacological interventions carried out to reduce anxiety. Based on this background, the researcher is interested in examining the effect of five-finger hypnosis therapy on the anxiety level of pre-operative patients at Jakarta Workers Hospital.

Method

This type of research is quantitative descriptive research with quasy experimental method with pre-post without control approach. The sample used with respondents totalled 18 respondents. The research instrument used in this study was the HARS questionnaire which the author made provided closed questions. Before being given a research instrument, an explanation was given before approval, the purpose of the research, the benefits of the research, the benefits for research subjects, the confidentiality of research documents, and compensation for research subjects contained in the informed consent (Nursalam, 2021).

The instruments in this study were in the form of questionnaire sheets. As well as supporting equipment such as paper and pens. This study used a form, namely a questionnaire. Data collection was carried out using primary data, namely data obtained directly from respondents through filling out questionnaires. By first giving a brief explanation of the questionnaire, how to

fill out the questionnaire and asking the respondent if there are things that are not understood. The analyses used were uni variate and bi-variate analyses.

Analysis Univariat

This univariate data analysis is used to obtain an overview of the frequency distribution and percentage of each variable studied for both dependent and independent variables. The analysis uses software (Ms. Excel).

Bivariate Analysis

This analysis is carried out by connecting the independent variables and dependent variables. The aim is to see the effect of five-finger hypnosis therapy on the level of anxiety of pre-operative patients at the Jakarta Workers Hospital.

Result and Discussion

Univariate Analysis

Frequency distribution of respondent characteristics Frequency distribution of preoperative respondent characteristics based on age, gender, education at the Workers General Hospital (n=18).

Table 1. Result of univariate analysis based of age, gender, and education

Patient characteristics	N	(%)
Age		
17-25 years	2	11.1
26-35 years	11	61.1
36-45 years	4	22.2
46-55 years	1	5.6
Sex		
Men	4	22.2
Women	14	77.8
Education		
Junior High School	3	16.7
Senior High School	12	66.7
College	3	16.7
Total	18	100.0

Based on the frequency distribution table of the characteristics of respondents with 18 preoperative patients at the Jakarta Workers General Hospital, most of them were aged 26-35 years as many as 11 respondents (61.1%), female gender as many as 14 respondents (77.8%), most of them had high school education as many as 12 respondents (66.7%).

Dependent Variable (Anxiety)

Mean distribution based on anxiety of preoperative patients at Jakarta General Hospital (n=18).

Table 2. Anxiety analysis result

Anxiety	Mean	Std Deviation	Min - Max	N
Pre	26.05	1.474	24.00 - 29.00	18
Post	17.94	2.919	14.00 - 23.00	18

Based on the table shows the average value of anxiety before and after the intervention of preoperative patients with finger holding therapy at the Jakarta Workers General Hospital, where before the treatment of finger holding therapy the average anxiety was 26.05 with a minimum anxiety value of 24.00 and a maximum anxiety of 29.00. While after the treatment of finger grasping therapy the average anxiety is 17.94 with a minimum value of 14.00 and a maximum anxiety value of 23.00.

Data Normality Test

Before conducting bivariate analysis, data normality is first carried out, the point is to carry out the analysis that will be used later. Where the data normality test is known by looking at the p-value in the Shapiro Wilk test because the sample is less than 50 respondents. If the p-value > 0.05 is obtained, the data is said to be normally distributed and bivariate tests can use the paired t-test.

Normality test of anxiety data before and after finger holding therapy treatment for preoperative patients at the Jakarta General Hospital for Workers (n = 18).

Table 3. Result of Anxiety normality test

Variable	P-value	Characteristic
Anxiaty		
Pre	0.294	Normal distribution
Post	0.088	Normal distribution

Based on the table shows the normality test with a p-value > 0.05. So it can be concluded that the data is normally distributed. This means that the bivariate test used is the paired t-test.

Bi-variate Analysis

Bi variate analysis is an analysis to determine the effect of giving finger holding therapy on anxiety in preoperative patients at the Jakarta Workers General Hospital. Then the bivariate test was analyzed: Differences in anxiety before and after being given finger grasping therapy in preoperative patients at the Jakarta Workers General Hospital

Analysis of the effect of finger grasping therapy on anxiety of preoperative patients at the Jakarta Workers General Hospital (n = 18).

Table 4. Result of bi-variate analysis anxiety

Anxiety	Mean	Difference-mean	SD	P-value
Pre	26.05	8.111	1.474	0.000
Post	17.94		2.919	

Based on the table of results of bivariate analysis of anxiety before and after being given finger holding therapy in preoperative patients at the Jakarta Workers General Hospital. Where it is obtained that the average anxiety before intervention is 26.05 with a standard deviation of 1.474. While the average value of anxiety after intervention is 17.94 with a standard deviation of 2.919. Based on statistical tests obtained p value <0.05 (0.000) which means that there is a significant difference between anxiety before and after the intervention of finger grasp therapy in preoperative patients.

Uni variate Analysis
Age

Based on the results of the frequency distribution study of 18 preoperative patients at the Jakarta Workers General Hospital, most of them were aged 26-35 years as many as 11 respondents (61.1%).

The results of this study are in line with the results of Alaei et al. (2024) improving sleep quality in postoperative patients with acute pain in the provision of aromatherapy which states that most of the respondents who performed surgical operations were aged 26-35 years as much as 53.1%. This shows that patients who have surgery have a production age due to trauma, infection, or reproductive problems.

According to Bustos et al. (2021) surgery is also a difficult experience for almost all patients. Various bad possibilities can occur which will be harmful to the patient. Most of the respondents aged 26-35 years who underwent surgery, this is because at this age it is a productive age, so many people at this age have surgery such as SC, productive age often has accidents. Meanwhile, according to Zou et al. (2022) patients with productive age are easier to tolerate surgery, such as no comorbid diseases.

The conclusion of the researchers was that patients who underwent surgery were at a productive age, namely between 26-44 years old, this was due to various factors. Productive age is often involved in high physical activity, heavy work, or traffic accidents. Trauma such as fractures, head injuries, or serious wounds often require surgery. In addition, productive age often experiences several infections, such as large abscesses or acute appendicitis, which often occur in productive age and require immediate surgery to prevent complications.

Gender/Sex

Based on the results of the study of 18 preoperative patients at the Jakarta Workers General Hospital, most of them had female gender as many as 14 respondents (77.8%). The results of this study are in line with the results of Nurjanah (2024), which states that most of the respondents who underwent surgery were women at 58%, this shows that most of the patients who underwent surgery were women.

The majority of respondents who performed surgery were women at 58%, this shows that most of the patients who performed surgery were women. According to Windriarto et al. (2022) surgery is an invasive treatment action through conditions to open or display the body part to be treated and terminated. Surgery is a treatment that uses invasive methods by opening and displaying the part of the body to be treated. Women often have surgery for various reasons such as cesarean section, cancer surgery. According to Nasirova & Agababyan (2020), who states that women are often performed cesarean section, postpartum surgery, women also have a risk of breast cancer and uterine cancer that need surgery.

The researcher concluded that most of the respondents who underwent surgery were women, this is because women are endowed with something that men do not have such as pregnancy and childbirth where women are often performed by cesarean section, surgical removal of former childbirth. Some women are also at risk of cancer which requires surgical removal of tumours in both the breast and uterus. Even women also need surgery to overcome fertility problems.

Education

Based on the results of the frequency distribution study of 18 preoperative patients at the Jakarta Workers General Hospital, most of them had a high school education as many as 12 respondents (66.7%). The results of this study are in line with the results of Samsir & Yunus (2020), which states that most respondents have a high school education as much as 51.2%. This shows that patients who have surgery have an education in the middle category.

According to Afzal et al. (2023) that with high school education, it can make more informed decisions than basic education. Where surgery is a difficult process in making a decision for almost all patients. Because with this surgical action there will be risks that can occur if the patient is performed surgery both during surgery and after surgery. According to Rothrock (2022) patient education also determines the approval of surgery. Secondary education is faster to make decisions because they are able to receive proper explanations. Therefore, patients and families usually rethink when asked for consent to surgery.

The researcher concluded that patients who underwent surgery had a high school education because this education is included in the secondary education level, and at this time high school education is found in many regions and cities. When surgery will be performed, it is necessary to make the right decision. With this high school education, it can make the right and fast decisions compared to basic education. In addition, high school education will be easier to receive information and easier to accept explanations delivered by doctors and health teams. The hope is that they can make decisions more quickly, so that the disease can be treated immediately with surgery or surgery.

Anxiety before being given finger holding therapy

Based on the results of the study, it shows the average value of anxiety before being given a finger holding therapy intervention in preoperative patients at the Jakarta Workers General Hospital, where the average anxiety is 26.05 with a minimum anxiety value of 24.00 and a maximum anxiety of 29.00. The results of this study are in line with Bedaso et al. (2022), which states that most of the anxiety levels of preoperative patients are severe anxiety as much as 40.8%.

The results of this study are in accordance with the theory put forward by McGovern et al. (2022) that anxiety is closely related to feelings of uncertainty and helplessness as a result of an assessment of an object or situation. Anxiety arises as a response to stress, both physical and physiological stress. That is, Anxiety occurs when a person feels threatened both physically and psychologically. This is reinforced by Sandra et al. (2023) that anxiety is an emotional reaction to subjective individual judgements, which are influenced by the subconscious and the cause is not specifically known.

According to the author, anxiety in patients before surgery is a vague concern felt by patients because they do not know about the consequences of the surgical process, so preoperative preparation is very important to support the success of surgery.

Anxiety after being given finger holding therapy

Based on the results of the study, it shows the average value of anxiety after being given a finger holding therapy intervention in preoperative patients with at the Jakarta Workers General Hospital, where the average anxiety is 17.94 with a minimum value of 14.00 and a maximum anxiety value of 23.00. The results of this study are in line with Stein et al. (2025) who said that most respondents experienced a decrease in anxiety levels that were previously severe anxiety and after being given the intervention most respondents had mild anxiety as much as 40.8%.

According to the theory of Aminah et al. (2023), the use of five-finger hypnosis is a verbal communication art that aims to bring the client's mind waves into trance (alpha/theta waves). Also known as self-hypnosis which aims for self-programming, eliminating anxiety by involving parasympathetic nerves and will reduce the increase in heart work, breathing, blood pressure, sweat glands. Researcher analysis that the benefits of hypnosis include reducing prejudice; for anaesthesia to control nausea and vomiting; reduce fatigue; reduce anxiety; help healing surgery.

Therefore, it can be concluded that intervening with finger holding therapy in preoperative is beneficial to reduce anxiety in preoperative patients. Preoperative patients will be calmer in facing surgery in accordance with patient expectations, after surgery and patients will have more opportunities to express their goals and opinions regarding surgery, and will adapt better to pain and decreased physical mobility after surgery.

Bivariate Analysis

The effect of finger holding therapy on anxiety levels in preoperative patients

Based on the results of bivariate analysis of anxiety before and after being given finger holding therapy in preoperative patients at the Jakarta Workers General Hospital. Based on statistical tests, the p value is obtained <0.05 (0.000), which means that there is a significant difference between anxiety before and after being given a finger grasp therapy intervention in preoperative patients.

The results of this study are in line with Suhadi (2020) showing that there is a significant effect between the provision of five-finger hand-held relaxation therapy on anxiety levels in pre-operative patients. Where the anxiety level decreased after being given five-finger hypnosis therapy.

The results of this study are also supported by Wairata (2024) at Gondo Suwarno Ungaran Hospital, regarding the effect of a combination of breath relaxation and five-finger hypnosis therapy on pre-operative anxiety. Based on the results of statistical tests obtained p-value <0.05 (0.000). This means that there is a significant effect of providing a combination of breath relaxation interventions and five-finger hypnosis therapy on per-operative anxiety.

According to Mukhodaroh & Prasetya (2023), five-finger hypnosis is a self-thought distraction technique by hypnotising oneself. Five-finger hypnosis is able to lower a person's anxiety. Other research also shows that five-finger hypnosis is effective in reducing the anxiety level of respondents. The use of five-finger hypnosis is a verbal communication art that aims to bring the client's mind waves into trance (alpha/theta waves). Also known as self-hypnosis which aims for self-

programming, eliminating anxiety by involving parasympathetic nerves and will reduce the increase in heart work, breathing, blood pressure, sweat glands.

Researchers analyse that five-finger relaxation therapy can help reduce anxiety in per-operative patients because this technique combines elements of physical relaxation, deep breathing, and mind focus that help calm the nervous system. Light pressure finger grasping can stimulate the parasympathetic nerves, which are responsible for calming the body, slowing the heart rate and lowering the stress response. Each finger is often associated with a particular emotion (such as fear, anger, or sadness). By grasping and focussing on each finger, patients can feel more in control of their emotions.

Conclusion

The characteristics of respondents of preoperative patients at the Jakarta Workers Hospital are known, where most of them have an age of 26-35 years as much as 61.1%, high school education as much as 66.7%, female gender 77.8%. Known the frequency distribution picture of anxiety levels before being given five-finger hypnosis to patients at the Jakarta Workers Hospital, where the average anxiety is 26.05. Known the description of the frequency distribution of anxiety levels after being given five-finger hypnosis to patients at the Jakarta Workers Hospital, where the average anxiety is 17.94. There is an effect of five-finger hypnosis on anxiety levels after being given five-finger hypnosis to patients at the Jakarta Workers Hospital, with a p-value <0.05 (0.000).

Acknowledgments

Deepest gratitude to God Almighty and friends who have helped this study. It is only by God's grace that this self-writing can be completed on time and can also be published widely to the academic community in particular.

Author Contributions

This study was conducted by me personally, so the content presented is my full responsibility. The single author provides a space for free expression so that the satisfaction of pouring thoughts can be accommodated.

Funding

The source of funds in this research is the researcher himself, there is no funding assistance from any party. The absence of a funding group makes this paper truly academic and free of interest from any party.

Conflicts of Interest

There is no interest conflict in this research. this research is conducted for scientific studies that are widely disseminated through this journal. Writings that are free of conflicts of

interest will be disseminated without fear of the author, so that they can be free to continue working.

References

- Afzal, A., Khan, S., Daud, S., Ahmad, Z., & Butt, A. (2023). Addressing the digital divide: Access and use of technology in education. *Journal of Social Sciences Review*, 3(2), 883-895. <https://doi.org/10.54183/jssr.v3i2.326>
- Ala, A., & Chen, F. (2022). Appointment scheduling problem in complexity systems of the healthcare services: A comprehensive review. *Journal of Healthcare Engineering*, 2022(1), 5819813. <https://doi.org/10.1155/2022/5819813>
- Alaei, S., Abdolmalaki, M., Babamohamadi, H., & Ebrahimian, A. (2024). The Effects of Spiritual Care with and Without Aromatherapy on the Sleep Quality of Prisoners Referred to the Emergency Department of the Prison Clinic in Iran: A Randomized Clinical Trial. *Journal of Religion and Health*, 1-14. <https://doi.org/10.1007/s10943-024-02131-3>
- Aminah, S., Sugiarti, I., & Puspitasari, P. (2023). Penerapan Terapi Hipnosis Lima Jari Terhadap Penurunan Tingkat Cemas Pada (Tn. Y) Dengan Diagnosa Pre Operasi Closed Fraktur Patella Dextra Di Ruang Edelweiss RSUD Bayu Asih Purwakarta. *Jurnal Kesehatan Budi Luhur: Jurnal Ilmu-Ilmu Kesehatan Masyarakat, Keperawatan, Dan Kebidanan*, 16(2), 56-65. Retrieved from <https://jurnal.stikesbudiluhurcimahi.ac.id/index.php/jkbl/article/view/285>
- Bedaso, A., Mekonnen, N., & Duko, B. (2022). Prevalence and factors associated with preoperative anxiety among patients undergoing surgery in low-income and middle-income countries: a systematic review and meta-analysis. *BMJ Open*, 12(3), e058187. Retrieved from <https://bmjopen.bmj.com/content/12/3/e058187.abstract>
- Bustos, V. P., Bustos, S. S., Mascaro, A., Del Corral, G., Forte, A. J., Kim, E. A., Langstein, H. N., Manrique, O. J., & others. (2021). Regret after gender-affirmation surgery: a systematic review and meta-analysis of prevalence. *Plastic and Reconstructive Surgery--Global Open*, 9(3), e3477. <https://doi.org/10.1097/GOX.00000000000003477>
- Hardianti, N., & Akhriansyah, M. (2022). Pengaruh Hipnotis Lima Jari Terhadap Tingkat Kecemasan Pasien Pre Operasi di Rumah Sakit Bhayangkara M Hasan Palembang Tahun 2021. *Jurnal Kesehatan Bina Husada*, 14(04), 128-133. <https://doi.org/10.58231/jkbh.v14i04.233>
- Hartono, D., Hidayat, U. A., Cahyati, Y., & Poddar, S.

- (2021). Reducing anxiety levels through integrative intervention of five-finger hypnosis and aromatherapy. *Malaysian Journal of Medical Research (MJMR)*, 5(3), 5–10. <https://doi.org/10.31674/mjmr.2021.v05i03.002>
- McGovern, H. T., De Foe, A., Biddell, H., Leptourgos, P., Corlett, P., Bandara, K., & Hutchinson, B. T. (2022). Learned uncertainty: The free energy principle in anxiety. *Frontiers in Psychology*, 13, 943785. <https://doi.org/10.3389/fpsyg.2022.943785>
- Mukhodaroh, R., & Prasetya, C. H. (2023). Penerapan Hipnosi Lima Jari Dalam Menurunkan Ansietas Pada Pasien Hipertensi. *PROSIDING AKADEMI KEPERAWATAN WIDYA HUSADA SEMARANG*, 5(1), 26–29. Retrieved from <https://prosidings.d3per.uwhs.ac.id/index.php/eproc/article/view/51>
- Musarat, M. A., Irfan, M., Alaloul, W. S., Maqsoom, A., & Ghufuran, M. (2023). A review on the way forward in construction through industrial revolution 5.0. *Sustainability*, 15(18), 13862. <https://doi.org/10.3390/su151813862>
- Nasirova, Z. A., & Agababyan, L. R. (2020). Reproductive behavior of women after cesarean section. *International Scientific Review*, LXX, 88–92. Retrieved from <https://cyberleninka.ru/article/n/reproductive-behavior-of-women-after-cesarean-section>
- Nurjanah, N. (2024). *Hubungan Tingkat Nyeri, Lingkungan Rumah Sakit Dengan Kualitas Tidur Pada Pasien Post Operasi Laparotomi* [Thesis: Universitas Islam Sultan Agung Semarang]. Retrieved from <https://repository.unissula.ac.id/37139/>
- Nursalam. (2021). *Metodelogi penelitian* (1st ed.). Gramedia.
- Obeagu, E. I. (2025). Stress-induced hemostasis: mechanisms and implications for health. *Annals of Medicine and Surgery*, 87(6), 3300–3309. <https://doi.org/10.1097/MS9.0000000000003012>
- Pardede, J. A., Sitepu, S. F. A., & Saragih, M. (2018). The Influence of Deep Breath Relaxation Techniques and Five-Finger Hypnotic Therapy on Preoperative Patient Anxiety. *Journal of Psychiatry*, 3(1), 1–8. Retrieved from https://www.academia.edu/download/64721194/Journal_of_Psychiatry.pdf
- Rijwani, T., Kumari, S., Srinivas, R., Abhishek, K., Iyer, G., Vara, H., Dubey, S., Revathi, V., & Gupta, M. (2025). Industry 5.0: A review of emerging trends and transformative technologies in the next industrial revolution. *International Journal on Interactive Design and Manufacturing (IJIDeM)*, 19(2), 667–679. <https://doi.org/10.1007/s12008-024-01943-7>
- Rondonuwu, B. F., & Mandagi, D. W. (2023). Brand gestalt as a key determinant of tourist satisfaction and loyalty: Empirical study of super-priority destination Likupang. *Jurnal Ekonomi*, 12(02), 452–464. Retrieved from <https://ejournal.seaninstitute.or.id/index.php/Ekonomi/article/view/1699>
- Rothrock, J. C. (2022). *Alexander's care of the patient in surgery-E-Book*. Elsevier Health Sciences.
- Samsir, S., & Yunus, M. (2020). Faktor-Faktor Yang Mempengaruhi Istirahat Tidur Pada Pasien Post Operasi Di Ruang Keperawatan Bedah. *Healthy Papua-Jurnal Keperawatan Dan Kesehatan*, 3(1), 100–108. Retrieved from <http://www.jurnal.akpermarthenindey.ac.id/index.php/akper/article/view/28>
- Sandra, N., Ennimay, Handra, D., & Rahmanisa, T. A. (2023). *Edukasi Perioperatif: Persiapan Hingga Pelaksanaan Pada Pasien Laparotomi*. Yogyakarta: Zahir Publishing.
- Stein, D. J., Vigo, D. V., Harris, M. G., Kazdin, A. E., Viana, M. C., Hwang, I., Kessler, T. L., Manoukian, S. M., Sampson, N. A., Alonso, J., & others. (2025). Patterns and predictors of 12-month treatment of common anxiety, mood, and substance use disorders in the World Mental Health (WMH) surveys: treatment in the context of perceived need. *International Journal of Mental Health Systems*, 19(1), 10. <https://doi.org/10.1186/s13033-025-00661-1>
- Suhadi, & Pratiwi, A. (2020). Pengaruh hipnosis lima jari terhadap tingkat kecemasan pasien pre operasi di ruang perawatan bedah RSUD Pakuhaji. *Jurnal Health Sains*, 1(5), 320–330. <https://doi.org/10.46799/jhs.v1i5.54>
- Swindle, M. M., Elliott, H., & Smith, A. C. (2021). *Surgery: Basic Principles and Procedures*. In *Handbook of Laboratory Animal Science* (pp. 379–394). CRC Press. <https://doi.org/10.1201/9780429439964-16>
- Wairata, V. (2024). *Pengaruh Teknik Terapi Hipnotis 5 Jari Dalam Menurunkan Tingkat Kecemasan Pre Operasi Pada Pasien Sectio Caesarea Di Ruang Instalasi Bedah Sentral (IBS) Rumah Sakit dr. Gondo Suwarno Ungaran* [Thesis: Universitas Kusuma Husada Surakarta]. Retrieved from https://eprints.ukh.ac.id/id/eprint/5944/1/Naskah_Publikasi_Vivien_Wairata.pdf
- Windriarto, W., Susanti, I. H., & Triana, N. Y. (2022). Gambaran Surgical Apgar Score (SAS) Pada Pasien General Dan Spinal Anestesi Di RSUD ST Elisabeth Purwokerto. *Seminar Nasional Penelitian Dan Pengabdian Kepada Masyarakat*, 141–149. <https://doi.org/10.35960/snppkm.v2i1.1110>
- Zou, W., Zhang, Y., Gong, L., Zhang, M., Wu, X., Xie, J.,

& Zhang, M. (2022). Factors associated with psychosocial adjustment in working-age colorectal cancer survivors: A cross-sectional study. *Asia-Pacific Journal of Oncology Nursing*, 9(6), 100057. <https://doi.org/10.1016/j.apjon.2022.03.009>