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# The Effect Of Finger-Grasping Relaxation Techniques On Acute Post-Operative Pain Intensity With A Diagnosis Of Cystic Ovarian Neoplasma (OCN) In The ICU Of Toto Kabila Hospital

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**Abstract**. Ovarian cysts are a common reproductive health condition affecting women. Ovarian cysts are fluid-filled sacs in the ovaries or fallopian tubes that accumulate and surround the membrane formed from the outermost layer of the ovary. Patients undergo laparotomy surgery to remove the cysts. In postoperative patients, pain is a major issue that must be addressed immediately to ensure optimal recovery. Therefore, pain management interventions in postoperative pain reduction include finger grip relaxation therapy. The finger grip technique involves deep breathing and finger gripping, and requires relatively little time. This case study aims to describe the nursing care of finger grip relaxation in reducing postoperative pain. This case study design uses a descriptive approach with a flood containment process, with one respondent. Finger grip relaxation was performed for three days, each lasting 15 minutes, with therapy administered once daily. This case study demonstrates that after performing finger grip relaxation in patients experiencing postoperative pain, the pain scale changed from severe to moderate. Finger grip relaxation is effective in reducing postoperative pain.

## INTRODUCTION

Health is one of the problems faced by women, especially in reproductive health. According to the Indonesian Ministry of Health (2015), reproductive health is a state of physical, mental, and social health, not just the absence of disease or weakness, but all matters related to the reproductive system and its functions and processes. One of the problems of women's reproductive health, namely the presence of women's or gynecological diseases, is ovarian cysts (1). Ovarian cysts are a type of reproductive disease that often affects women. Ovarian cysts are a collection of fluid in the ovaries or fallopian tubes that accumulate and are surrounded by a membrane formed from the outer layer of the ovary(2).

Ovarian cysts can be caused by disruption of hormone production in the hypothalamus, pituitary gland, or the ovaries themselves. Ovarian cysts can arise from follicles that do not function during menstruation. Ovarian cysts are grouped into two groups, namely non-neoplastic ovarian

cysts which are usually benign and can shrink or disappear on their own after 2 to 3 months, Neoplastic cysts are malignant and generally require surgery. Malignancy in cysts is often found at the age of menarche and cysts at the age of over 45 years (2).

The World Health Organization (WHO) reported that the number of ovarian cyst cases in 2020 increased by 14,896 cases, with 9,581 deaths (1). The prevalence of ovarian cysts in children and adolescents is approximately 7.3%, with most being benign simple cysts and 25% being neoplastic cyst infections (3). The number of ovarian cyst cases in Indonesia reached 14,896 cases, with 9,581 deaths. In a study by Kau et al., (2023) at the Sitti Khadijah Gorontalo Women's and Children's Hospital (RSIA), the number of ovarian cyst cases in 2021 was 21 patients (4).

Signs and symptoms of ovarian cysts include pain during menstruation, frequent urination, and bloating. Most people often consider this condition unimportant because ovarian cysts do not cause or feel early symptoms and ovarian cysts are not very dangerous. However, when the condition of the ovarian cyst is known to enlarge, it can interfere with daily activities and if ignored or left untreated can develop into ovarian cancer (1). Research by Puspita et al., (2021) states that ovarian cysts are generally asymptomatic, but symptoms such as pain or menstrual cycle disorders can occur due to rupture of the cyst wall, pressure on surrounding organs, or lead to malignancyp(5).

Nursing practice is a service provided by nurses in the form of Nursing Care aimed at fulfilling the needs and independence of clients in caring for themselves. In implementing nursing care, nurses carry out a nursing process that includes nursing assessment, establishing nursing diagnoses, planning nursing actions, implementing and evaluating the results of nursing actions (6). Nursing care is a series of professional interactions between nurses and clients (individuals, families, or communities) that are carried out systematically, comprehensively and humanistically, the aim of which is to fulfill basic needs, make patients independent and overcome health problems.

One of the basic needs is safety and comfort, and pain is a problem that causes discomfort. In post-operative patients, pain is a major issue that must be addressed promptly to ensure optimal recovery. Uncontrolled pain can prolong hospitalization, increase the risk of complications, and hinder the healing process. Therefore, interventions provided to reduce pain in post-operative patients include pain management in the form of finger-holding relaxation therapy (2).

## METHOD

The design used is a case study using a nursing care process approach with individual targets, this study focuses on the use of finger grips to reduce pain in postoperative patients. The application of evidence-based therapy was carried out for 3 days in 15 minutes with a frequency of therapy once a day. starting from January 14 to 16, 2026, at Toto Kabila Regional Hospital. Data collection methods on nursing care were obtained through interviews and observations. The data collected are related to assessment data, nursing diagnoses, interventions, implementation and evaluation. The analysis method used is a descriptive data analysis method, namely by describing the results of nursing care with individual targets with the application of finger grip relaxation to reduce postoperative pain.

The patient in this case study is a patient with post-operative laparotomy pain with a medical diagnosis of Cystic Ovarian Neoplasm (NOK). Before carrying out finger grip relaxation therapy, an interview was first conducted, after which the researcher applied finger grip relaxation for 3 days in 15 minutes with a frequency of therapy administration of 1 time/day.

## RESULTS AND DISCUSSION

Mrs. S, 42, was admitted to the ICU on January 13, 2026, after a laparotomy. An assessment on January 14, 2026, revealed vital signs (TTV): BP: 120/81 mmHg, Pulse: 127 beats/minute, RR: 20 beats/minute, SB: 36.1°C, SPO2: 99%. The patient was on a ventilator in SIMV mode. The patient complained of pain in the post-laparotomy wound, which worsened with movement, felt like stabbing pain, and had abdominal pain on a pain scale of 8. The pain was continuous, and the patient grimaced and acted protectively (alert). Based on the nursing problem analysis, the primary problem identified was acute pain caused by the patient's physical injury. This was indicated by the patient's complaint of pain in the post-operative wound. The intervention given to the patient with a nursing diagnosis of acute pain was pain

management with the aim of reducing pain intensity. Actions taken to reduce pain include collaboration in administering fentanyl analgesic medication 1 cc/hour via Syringe Pump, non-pharmacological interventions given to patients are pain management using finger grip relaxation. The following are the procedures for implementing finger grip relaxation: position the patient as comfortably as possible. After that, the patient is asked to grip the fingers from the thumb to the little finger for 3 minutes and repeat up to 3 times, while gripping the patient is asked to take a deep breath, evaluate the patient's pain level after performing the finger grip relaxation technique.

**The implementation of the finger grip relaxation technique was carried out**

| Date | Finger Grip Relaxation Therapy | |
|---|---|---|
| | Pre-Implementation | Post-Implementation |
| 14/01/2026 | Skala Nyeri : 8 | Skala Nyeri : 8 |
| 15/01/2026 | Skala Nyeri : 8 | Skala Nyeri : 7 |
| 16/01/2026 | Skala Nyeri : 7 | Skala Nyeri : 6 |

*Data Primer*

Implementation of the first day of giving finger grip relaxation therapy, the patient was taught how to do finger grip relaxation therapy, although the patient's condition was very weak the patient did it well, the pain felt by the patient had not decreased, the patient still felt severe pain. On the second day of giving finger grip relaxation therapy the patient had done finger grip relaxation therapy independently and there was a decrease in pain from a scale of 8 to 7, on this day the patient had been removed from the ventilator replaced with NRM 15 LPM and the patient was scheduled to tilt right tilt left but the patient refused to do it because he felt pain in the post-operative wound. And on the third day of giving finger grip relaxation therapy the patient said he often did finger grip relaxation therapy and after being evaluated there was a decrease in pain intensity from a scale of 7 to 6, the patient was also willing to follow the recommendation to change the position of tilting right tilt left.

Based on the case study above, it was found that administering the finger grip relaxation technique to patients experiencing pain was effective in reducing their pain levels. This was evident in the change in pain levels before and after applying the finger grip relaxation technique, where the patient experienced a decrease in pain scale from 8 to 6 after three days of application.

The above results are in line with research conducted (7), showing that there is an effect of finger grip on reducing pain intensity from the mean value of 5.80 down to 5.23 which means that giving finger grip relaxation has an effect on reducing pain intensity (7). This research is also in line with the results of research conducted by Pratiwi et al., (2024) the implementation of the finger grip relaxation technique carried out for 3 days found that the patient's pain scale decreased from a scale of 5 to 2(8). Larasati & Hidayati, (2022) noted in her research that finger grip relaxation therapy given to 2 respondents for 3 days was able to reduce post-operative pain, both patients experienced a decrease from a moderate pain scale to a mild pain scale (9).

The finger-holding relaxation technique is a movement that relieves mental and physical stress and tension, thereby increasing pain tolerance. This finger-holding relaxation method can help relax the body, mind, and soul (8). Relaxing the finger-holding technique can calm the body by restoring and controlling emotions. The finger-holding technique is performed by taking deep breaths while holding the fingers, which only takes a relatively short time (10).

Holding your fingers while regulating your breath slowly (relaxation) can reduce or alleviate physical and emotional tension, because holding your fingers will warm the energy entry and exit points in the meridians (energy channels) located in our fingers. The reflex points on the hands will provide reflex (spontaneous) stimulation when holding (11). Along our fingers there are channels or energy meridians that are connected to various organs and emotions. The reflex points on the hands provide reflex (spontaneous) stimulation when holding. This stimulation will flow a kind of shock wave or electricity to the brain. The wave is received by the brain and processed quickly forwarded to the nerves in the affected body organ, so that blockages in the energy pathways become smooth (9).

Stimulation of the surgical wound triggers pain mediators, which then carry stimulus impulses through non-receptor

afferent nerve fibers to a gel-like substance in the spinal cord, through the thalamus, and finally to the cerebral cortex where the impulses are interpreted as pain. Holding fingers and controlling breathing can reduce emotional and physical tension because the meridian energy exit points are located in the fingers (8).

## CONCLUSION

Based on the implementation results above, it can be concluded that finger-hold relaxation therapy is an effective non-pharmacological complementary nursing intervention in helping reduce pain intensity in post-laparotomy patients. This therapy provides a relaxing effect that can reduce physical and psychological tension and increase patient comfort.

## REFERENCES

1. Ulfah R, Iswandari ND, Anisa FN. Analisis Kejadian Kista Ovarium Pada Pasangan Usia Subur Di Rumah Sakit Umum Daerah Muara Teweh Tahun 2021. 2023;2(1):87–93.
2. Zahrani AA, Rahayu T, Wahyuni S, Jl A, Raya K, Tengah J. Analisis Faktor-Faktor Yang Mempengaruhi Kejadian Kista Ovarium Pada Wanita Usia Subur Di Puskesmas Tlogosari Kulon Semarang Fakultas Ilmu Keperawatan , Universitas Islam Sultan Agung , Indonesia Kista Ovarium Merupakan Salah Satu Jenis Penyakit Reproduksi Yang Sering Menyerang Beberapa Literatur Lain Membedakan Antara Kista Dengan Tumor , Perlu Diketahui Kista Merupakan Sendiri Merupakan Jaringan . Oleh Sebab Itu , Beberapa Literatur Membedakan Antara Kista Dengan. 2025;3.
3. Tang Y, Han T. Journal Of Infection And Public Health A Quantitative Analysis Infection Of Ovarian Cyst Based On Examination Data Of Computed Tomography And Type-B Ultrasonography. J Infect Public Health [Internet]. 2021;14(1):84–8. Available From: Https://Doi.Org/10.1016/J.Jiph.2019.08.003
4. Kau M, Adam D, Djafar L. Determinants Of Ovarian Cyst Occurrence In Women Of Childbearing Age In Rsia Sitti Khadidjah Gorontalo. 2023;
5. Puspita A, Munir MA, Faris A, Program MP, Infection D. Case Report : Treatment Of Ovarian Cysts With Total Hysterectomy And Bilateral Salfingooferectomy. 2021;3(2):149–53.
6. Tim Pokja SIKI DPP PPNI. Standar Intervensi Keperawatan Indonesia. Jakarta Selatan: Dewan Pengurus Pusat Persatuan Perawat Nasional Indonesia; 2018.
7. Jasri;, Indrawati;, Aprilla; N. Pengaruh Teknik Relaksasi Genggam Jari Terhadap Penurunan Intensitas Nyeri Pada Pasien Post Operasi Fraktur Di RSUD Bengkalis. 2023;1:29–32.
8. Pratiwi RI, Hudiyawati D, Yani AJA, Kartasura K, Sukoharjo K. Penerapan Teknik Relaksasi Genggam Jari Terhadap Penurunan Rasa Nyeri Pada Pasien Post Operasi Kraniotomi. 2024;2(2).
9. Larasati I, Hidayati E. Relaksasi Genggam Jari Pada Pasien Post Operasi. 2022;
10. Hanifah N, Noviani W, Wahyuni S. Pengaruh Relaksasi Genggam Jari Dan Dzikir Untuk Mengurangi Nyeri Pada Pasien Post- Operasi Appendicitis : Studi Kasus. 2025;6:8802–9.
11. Alahtiar; R, Fitri; NL, Pakarti; At. Impelementasi Relaksasi Genggam Jari Terhadap Skala Nyeri Pada Pasien Post Operasi Laparatomi. 2025;5:533–40.