

BAB 7

SIMPULAN DAN SARAN

7.1 Simpulan

Pada penelitian ini, sebanyak 13 dari 23 responden (56,5%) mengalami penurunan skor INVR hingga mencapai 0 setelah diberikan kombinasi *acupressure* pada titik ST36 (*Zusanli*) dan P6 (*Neiguan*) dengan aromaterapi *peppermint*. Hasil penelitian menunjukkan bahwa rata-rata skor CINV menurun dari $10,57 \pm 4,79$ sebelum intervensi menjadi $2,22 \pm 2,91$ setelah intervensi, dengan rata-rata penurunan skor sebesar $8,35 \pm 2,23$. Hasil analisis statistik menunjukkan nilai signifikansi $p = 0,000$ ($p < 0,05$), sehingga dapat disimpulkan bahwa kombinasi *acupressure* pada titik ST36 (*Zusanli*) dan P6 (*Neiguan*) dengan aromaterapi *peppermint* berpengaruh terhadap penurunan CINV pada pasien kanker yang menjalani kemoterapi.

7.2 Saran

7.2.1 Bagi Pasien Kanker

Pasien kanker yang menjalani kemoterapi bisa menggunakan kombinasi *acupressure* pada titik ST36 (*Zusanli*) dan P6 (*Neiguan*) dengan aromaterapi *peppermint* sebagai terapi komplementer yang dapat membantu mengurangi *chemotherapy induced nausea and vomiting* (CINV). Pelaksanaannya tetap perlu memperhatikan kondisi pasien dan dilakukan tanpa mengabaikan terapi farmakologis yang telah diberikan.

7.2.2 Bagi Keluarga Pasien

Keluarga dapat terus memberikan dukungan dan pendampingan kepada pasien selama menjalani pengobatan, baik secara emosional dan membantu pelaksanaan terapi komplementer seperti *acupressure* dan aromaterapi *peppermint*. Selain itu, keterlibatan keluarga juga penting agar intervensi dapat dilakukan secara rutin dan berkelanjutan di rumah.

7.2.3 Bagi Pihak Puskemas

Puskemas diharapkan dapat mempertimbangkan kombinasi *acupressure* pada titik ST36 (*Zusanli*) dan P6 (*Neiguan*) dengan aromaterapi *peppermint* sebagai salah satu intervensi komplementer dalam pelayanan pasien kanker yang sedang kemoterapi. Intervensi digunakan sebagai upaya pendamping untuk membantu menurunkan keluhan *chemotherapy induced nausea and vomiting* (CINV) pada pasien.

7.2.4 Bagi Peneliti Selanjutnya

Penelitian selanjutnya diharapkan dapat mengembangkan penelitian mengenai kombinasi *acupressure* pada titik ST36 (*Zusanli*) dan P6 (*Neiguan*) dengan aromaterapi *peppermint* pada sampel yang lebih besar dan beragam, serta menganalisis faktor-faktor yang dapat memengaruhi efektivitas intervensi terhadap CINV, seperti stadium kanker, siklus kemoterapi, usia, jenis kelamin, dan kondisi psikologis pasien.

DAFTAR PUSTAKA

1. WHO. World Health Organization [Internet]. 2020.
2. Anand U, Dey A, Chandel AKS, Sanyal R, Mishra A, Pandey DK, et al. Cancer chemotherapy and beyond: Current status, drug candidates, associated risks and progress in targeted therapeutics. *Genes Dis*. 2023;10(4):1367–401.
3. Rukmi DK, Nofiyanto M. Chemotherapy-Induced Nausea and Vomiting (CINV) Based on Blood Types among Cancer Patients in Yogyakarta, Indonesia. *Nurse Media J Nurs*. 2023;13(2):176–87.
4. Gour S, Kore A, Das A, Dane J, Maurya RK. A Qualitative Study to Explore Patient ' s experiences on Chemotherapy-induced Nausea and Vomiting : Focusing Impact on Daily Life. 2023;8(1):21–8.
5. Bray F, Laversanne M, Sung H, Ferlay J, Siegel RL, Soerjomataram I, et al. Global cancer statistics 2022: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA Cancer J Clin*. 2024;74(3):229–63.
6. Kementrian Kesehatan RI. Rencana kanker nasional 2024-2034. Kementrian Kesehat Republik Indones. 2024;(September):93–4.
7. Riskesdas. Survei Kesehatan Indonesia 2023 (SKI). Kemenkes. 2023;235.
8. Wilson BE, Jacob S, Yap ML, Ferlay J, Bray F, Barton MB. Estimates of global chemotherapy demands and corresponding physician workforce requirements for 2018 and 2040: a population-based study. *Lancet Oncol* [Internet]. 2019;20(6):769–80.
9. Sari N, Sauriasari R, Putri RA. An Overview of Antiemetic Prophylaxis for Chemotherapy- Induced Nausea and Vomiting in Head and Neck Cancer Patients at Dharmais National Cancer Hospital. :282–8.
10. Mosa ASM, Mosharraf Hossain A, Lavoie BJ, Yoo I. Patient-related risk factors for Chemotherapy-Induced Nausea and Vomiting: A systematic review. *Front Pharmacol*. 2020;11(April):1–15.
11. Gupta K, Walton R, Kataria SP. Cancer Treatment and Research Communications Chemotherapy-Induced Nausea and Vomiting : Pathogenesis , Recommendations , and New Trends. *Cancer Treat Res Commun* [Internet]. 2021;26(December 2020):100278. Available from: <https://doi.org/10.1016/j.ctarc.2020.100278>
12. Java E, Mu S, Windarwati HD. The Relationship Between Anxiety and

Events Chemotherapy-Induced Nausea Vomiting (CINV) Breast Cancer Patients with Chemotherapy in. 2024;12(2):97–104.

13. Mehta P, Dhapte V, Kadam S, Dhapte V. Contemporary acupressure therapy: Adroit cure for painless recovery of therapeutic ailments. *J Tradit Complement Med* [Internet]. 2017;7(2):251–63.
14. Li H, Du C, Lu L, Hu X, Xu H, Li N, et al. Transcutaneous electrical acupoint stimulation combined with electroacupuncture promotes rapid recovery after abdominal surgery: Study protocol for a randomized controlled trial. *Front Public Heal*. 2022;10.
15. Huang H, Yue X, Huang X, Long W, Kang S, Rao Y, et al. Brain Activities Responding to Acupuncture at ST36 (zusanli) in Healthy Subjects: A Systematic Review and Meta-Analysis of Task-Based fMRI Studies. *Front Neurol*. 2022;13(July).
16. Li YW, Li W, Wang ST, Gong YN, Dou BM, Lyu ZX, et al. The autonomic nervous system: A potential link to the efficacy of acupuncture. *Front Neurosci*. 2022;16(December):1–17.
17. JIANG J feng. Regional heterogeneity of acupoints stimulation in the modulation of autonomic nerve system. *World J Acupunct - Moxibustion* [Internet]. 2024;34(2):77–82.

Serotonin in the Gut–Brain Axis. *Int J Mol Sci*. 2025;26(3):1–15.

19. Ghezelbash S, Khosravi M. Acupressure for nausea - vomiting and fatigue management in acute lymphoblastic leukemia children. 2018;75–81.
20. Wicaksono B, Hadian FI, Firdaus AD, Ulhaq ZS. The effect of digital acupressure on chemotherapy-induced nausea in Indonesian patients with stages III-IV breast cancer. *J Ayurveda Integr Med*. 2023;14(5):0–5.
21. Chang YC, Chen CM, Lay IS, Lee YC, Tu CH. The effects of laser acupuncture dosage at PC6 (Neiguan) on brain reactivity: a pilot resting-state fMRI study. *Front Neurosci*. 2023;17(October):1–13.
22. Dhamanik R, Eriyani FD. Terapi akupressure PC6 dan ST36 dapat menurunkan mual muntah pada pasien kanker payudara yang menjalani kemoterapi. 2023;000.
23. Zhao H, Ren S, Yang H, Tang S, Guo C, Liu M, et al. Peppermint essential oil: its phytochemistry, biological activity, pharmacological effect and application. *Biomed Pharmacother* [Internet]. 2022;154:113559.
24. Fung TKH, Lau BWM, Ngai SPC, Tsang HWH. Therapeutic effect and mechanisms of essential oils in mood disorders: Interaction between the nervous and respiratory systems. *Int J Mol Sci*. 2021;22(9).

25. Istiroha I, Zahroh R, Wafiyah Q, Syaiful Y. Effect of Inhaled Peppermint Aromatherapy on Chemotherapy-Induced Acute Nausea and Vomiting among Women with Breast Cancer in Gresik Regency. *Indones J Cancer*. 2023;17(3):186.
26. Siyamun Nurrohmi L, Ageng Lumadi S, Yekti Mumpuni R. Perbandingan efektifitas aromaterapi pappermint dan lavender terhadap penurunan efek mual muntah. 2021;6(12).
27. Eghbali M, Varaei S, Hosseini M, Yekaninejad MS, Shahi F. The Effect of Aromatherapy with Peppermint Essential Oil on Nausea and Vomiting in the Acute Phase of Chemotherapy in Patients with Breast Cancer. 2018;20(9):66–71.
28. Henry LL, Kidwell KM, Kozar S, Snyder S, Zick SM. Self-acupressure for patients with breast cancer experiencing aromatase inhibitor-associated musculoskeletal symptoms: Protocol for the AcuAIM randomized pilot trial. *PLoS One* [Internet]. 2025;20(1 January):1–14. Available from: <http://dx.doi.org/10.1371/journal.pone.0311044>
29. Kharisna D, Putra ID, Keperawatan F, Sakit R, Daerah U, Achmad A, et al. Studi Kasus : Pengaruh Akupresur Titik P6 Dan St36 Pada Pasien Kanker Dengan Nausea. 2025;2(2):23–8.
30. Sun ZG, Pi YL, Zhang J, Wang M, Zou J, Wu W. Effect of acupuncture at ST36 on motor cortical excitation and inhibition. *Brain Behav*. 2019;9(9):1–8.
31. Yu W, Tang L, Li H, Wang Y, Shen Z. Neiguan (PC6) acupoint stimulation for preventing chemotherapy-induced nausea and vomiting: a cost-effective supplement in guideline-inconsistent chemotherapy-induced nausea and vomiting prophylaxis subgroup. *J Tradit Chinese Med*. 2024;44(3):581–5.
32. Khanghah AG, Rizi MS, Nabi BN, Adib M, Kazem E, Leili N. Effects of Acupressure on Fatigue in Patients with Cancer Who Underwent Chemotherapy. *J Acupunct Meridian Stud* [Internet]. 2019;12(4):103–10. Available from: <https://doi.org/10.1016/j.jams.2019.07.003>
33. Dwi Y, Werdani W. Three Acupoints of Acupressure Improve the Anxiety Level in Cancer Patients based on Types of Cancer Therapy. 2019;13(December):110–5.
34. Byju A, Pavithran S, Antony R. Effectiveness of acupressure on the experience of nausea and vomiting among patients receiving chemotherapy. 2018;28(2):132–8.
35. Yulianti, Adhisty K, Purwanto S. Combination therapy: autogenic relaxation and acupressure in breast cancer patients. 2023;8–14.
36. Sadat S, Shushtari G, Kennedy AB, Jahangiri M, White SJ, Miladinia M, et

- al. Comparing Massage , Acupressure , and Combined Therapy for Managing Cancer-related Pain , Fatigue , and Sleep Disturbance : A 2 × 2 Factorial Randomized Controlled Trial. 2025;18(4):31–44.
37. Christiani N, Nur I, Bitara W. Effectiveness of Point ST36 (Zusanli) Acupressure on Emesis Gravidarum First Trimester in the Tenganan Health Center. 36:463–71.
38. Rahmah S, Alfiyanti D. Penurunan Mual Muntah Pasien Acute Limfoblastik Leukimia yang Menjalani Kemoterapi dengan Terapi Akupresur Pada Titik P6 (Neiguan) dan Titik ST36 (Zusanli). 2021;6.
39. Windayanti H. Ibm Edukasi Kesehatan Teknik Akupresur untuk Mengurangi Nyeri Haid pada Remaja. :23–8.
40. Carlson LE, Cohen MR, Deng G. Clinical practice guidelines on the evidence-based use of integrative therapies during and following breast cancer treatment. 2018;67(3):194–232.
41. Jafari M, Shabani F, Sheikh M, Fathollahi, Barghi TS, Babak S, et al. Effect of Acupressure on Pain and Sleep Quality of Patients with Cancer after Undergoing Surgery Admitted to the Intensive Care Unit : A Single - blind Randomized Clinical Trial. 2025;531–7.
42. Apriyanti M, Zahra AN. Efektifitas Terapi Akupresur Untuk Mengurangi Mual Muntah Pada Pasien Kanker Kolorektal Yang Menjalani Kemoterapi : Studi Kasus The Effectiveness of Acupressure Therapy to Reduce Nausea and Vomiting in Colorectal Cancer Patients Undergoing Chemotherapy : J Heal Cardiovasc Nurs. 2022;2(2):71–80.
43. Rumapea¹ IM, Pranoto² S, Hutapea³ J, Nababan⁴ T, Keperawatan F, Kebidanan D. Pengaruh Aromaterapi Peppermint Terhadap Mual Muntah Pasien Anak Yang Menjalani Kemoterapi Di Murni Teguh Medan. J Kesehat Masy Darmas [Internet]. 2023;2(2):78–83.
44. Sari CM, Herawati T, Edison Sunarya C. Effects of Peppermint Aromatherapy in Cardiovascular Disease Patients: A Literatur Review. J Ilm Ilmu Keperawatan Indones. 2023;13(01):1–13.
45. Efe Ertürk N, Taşcı S. The Effects of Peppermint Oil on Nausea, Vomiting and Retching in Cancer Patients Undergoing Chemotherapy: An Open Label Quasi–Randomized Controlled Pilot Study. Complement Ther Med. 2021;56(September 2020).
46. Rahmi F, Kharisna D, Dewi S, Keperawatan F, Sakit R, Daerah U, et al. Penerapan Aromaterapi Peppermint Pada Pasien Kanker Yang Menjalani Kemoterapi Dengan Masalah Keperawatan Nausea. 2024;2(2):24–9.
47. Hamzeh S, Safari-Faramani R, Khatony A. Effects of Aromatherapy with Lavender and Peppermint Essential Oils on the Sleep Quality of Cancer

- Patients: A Randomized Controlled Trial. Evidence-based Complement Altern Med. 2020;2020.
48. Cheng H, Lin L, Wang S, Zhang Y, Liu T, Yuan Y, et al. Aromatherapy with single essential oils can significantly improve the sleep quality of cancer patients: a meta-analysis. BMC Complement Med Ther [Internet]. 2022;22(1):1–12. Available from: <https://doi.org/10.1186/s12906-022-03668-0>
 49. Hancı E. The Effect of Aromatherapy on Pain and Anxiety Levels Before Breast Biopsy : A Randomized Controlled Trial. 2025;21(3):190–6.
 50. Vora LK, Gholap AD, Hatvate NT, Naren P, Khan S, Chavda VP, et al. Essential oils for clinical aromatherapy : A comprehensive review TH WHO. J Ethnopharmacol [Internet]. 2024;330(October 2023):118180. Available from: <https://doi.org/10.1016/j.jep.2024.118180>
 51. Farrar AJ, Farrar FC. Clinical Aromatherapy. Nurs Clin North Am. 2020;55(January):489–504.
 52. Purwani R, Wijayanti A, Yulia. The Effect of Peppermint Aromatherapy on the Frequency of Nausea and Vomiting in First Trimester Pregnant Women. 2025;6(1):147–54.
 53. Fernández MA, Carmen M, Mues R, Figueras C, Altamirano M, Monge I, et al. Evaluation of chemotherapy - induced nausea and vomiting in low , moderate , and highly emetogenic schemes between sexes. Support Care Cancer 2025.
 54. Huang X, Li X, Li J, Luo L, Chen H, Tan Y, et al. Chemotherapy-Induced Nausea and Vomiting in Breast Cancer Patients: A Multicenter Prospective Observational Study. Asia-Pacific J Oncol Nurs [Internet]. 2021 Jul;8(4):433–7.
 55. Chemotherapy - induced nausea and vomiting in patients with breast cancer : a prospective cohort study. Breast Cancer [Internet]. 2020;27(1):122–8. Available from: <https://doi.org/10.1007/s12282-019-01001-1>
 56. Madjid V. Correlation Between Chemotherapy-Induced Nausea and Vomiting with Quality of Life in Patients with Ovarian Cancer at Dr . Cipto Mangunkusumo Hospital. 2024;28(2).
 57. Yeo W, Ngai NTY, Yip CCH, Mo FKF, Yeo VA, Ko JWH, et al. Risk Factors Associated with Chemotherapy-Induced Nausea and Vomiting Among Women with Breast Cancer Receiving Highly Emetogenic Chemotherapy : Individual Patient-Based Analysis of Three Prospective Antiemetic Trials. 2024;(March).
 58. Yokokawa T, Suzuki K, Tsuji D, Hosonaga M. Influence of menopause on chemotherapy- - induced nausea and vomiting in highly emetogenic

- chemotherapy for breast cancer : A retrospective observational study. 2023;(February):18745–54.
59. Tetrianti Y, Muliantino MR, Lenggogeni DP, Merdawati L. Hubungan Karakteristik Pasien dengan Keparahan Chemotherapy-Induced Nausea and Vomiting (CINV) pada Pasien Kanker Payudara yang Menjalani Kemoterapi. *J Ners*. 2025;9:7161–6.
 60. Celio L, Cortinovis D, Cogoni AA, Cavanna L, Martelli O, Carnio S, et al. Evaluating the impact of chemotherapy - induced nausea and vomiting on daily functioning in patients receiving dexamethasone - sparing antiemetic regimens with NEPA (netupitant / palonosetron) in the cisplatin setting : results from a randomized phase 3 study. *BMC Cancer* [Internet]. 2022;1–8. Available from: <https://doi.org/10.1186/s12885-022-10018-3>
 61. V. A. R, McDaniel RW. The Index of Nausea, Vomiting, and Retching: a new format of the Index of Nausea and Vomiting. *Oncol Nurs Forum* [Internet]. 1999;26:889–94.
 62. Moradian S, Work S. Translation and psychometric assessment of the Persian version of the Rhodes Index of Nausea , Vomiting and Retching (INVR) scale for the assessment of chemotherapy-induced nausea and vomiting. 2013;(October):1–8.
 63. Kim TH, Choi BM, Chin JH, Lee MS, Kim DH, Noh GJ. The Reliability and Validity of the Rhodes Index of Nausea , Vomiting and Retching in Postoperative Nausea and Vomiting. 2007;52(6):59–65.
 64. Zafar A, Khatoon S, Jawad M, Junaid K, Aisha A. Advancements and limitations in traditional anti - cancer therapies : a comprehensive review of surgery , chemotherapy , radiation therapy , and hormonal therapy. *Discov Oncol* [Internet]. 2025.
 65. Siregar HK, Nugroho, Santoso T, Aini I, Armiyati Y, Ekowati SI, et al. Keperawatan Onkologi. Munandar A, editor. *Media Sains Indonesia*; 2022. viii, 317.
 66. Wang S, Liu Y, Feng Y, Zhang J, Swinnen J, Li Y, et al. A Review on Curability of Cancers: More Efforts for Novel Therapeutic Options Are Needed. *Cancers (Basel)*. 2019;11:1782.
 67. Spicer JD, Cascone T, Wynes MW, Ahn M ju, Dacic S, Felip E, et al. Neoadjuvant and Adjuvant Treatments for Early Stage Resectable NSCLC : Consensus Recommendations From the International Association for the Study of Lung Cancer. *J Thorac Oncol* [Internet]. 2024;19(10):1373–414. Available from: <https://doi.org/10.1016/j.jtho.2024.06.010>
 68. Galloway M, Barlow P, Jordan J, Lo E. Neoadjuvant Chemotherapy for Early Breast Cancer : A Study on Response Rate and Toxicity. 2025;1–12.

69. Okuyama A, Boku N, Higashi T. Real-world emetic risk of chemotherapy and the corresponding antiemetic therapy in Japan : A study based on a nationwide database. 2022;(June 2021):1–10.
70. Eek D, Krohe M, Horsfield A, Pompilus F, Friebe R, Shields AL. Patient-reported preferences for oral versus intravenous administration for the treatment of cancer : a review of the literature. 2016;1609–21.
71. National Cancer Institute. Chemotherapy and You: Support for People with Cancer [Internet]. 2024.
72. Brown JS, Amend SR, Austin RH, Gatenby RA, Hammarlund EU, Pienta KJ. Updating the Definition of Cancer. 2023;1142–7.
73. Jones A. Pathology of Cancer : Causes , Pathophysiology , Diagnosis , Prevention and Treatment Journal of Medical & Surgical Pathology. :1–2.
74. Saravana SK. Fundamentals of Cancer Biology. Abhayam Publishers; 2023.
75. Arabestanino AR. Structural carcinoma overall process : a systematic review. 2024;4(2):88–99.
76. Savage PD, Lovato J, Brosnihan KB, Miller AA, Petty WJ, Cancer C, et al. Phase II Trial of Angiotensin- (1-7) for the Treatment of Patients with Metastatic Sarcoma. 2016;2016:13–5.
77. Haryanto, Wimpy, Lestari MA, Gunawan LS, Oktora Z, Janah R, et al. Epidemiologi Kanker Dan Penyakit Kronis. Nirwan M, Amraeni Y, editors. Purbalingga: Eureka Media Aksara; 2021.
78. Digambiro RA, Setyanigrum DAW, Chendrasari J, Lestari IW. Patologi Limfoma [Internet]. Digambiro RA, editor. Bandung: Widina Media Utama; 2025. Available from: 978-623-500-996-4
79. Bashir S Al, Albarakat MM, Alabedhalhim KK, Al-Khalaileh A, Alassaf A, Saleh O, et al. Knowledge of cancer symptoms and risk factors: A cross-sectional study from a developing country. Medicine (Baltimore). 2024;103(15):E37823.
80. Antari GAA, Damaiyanti DW, Rita RS, Aryandi R, Maliza R, Kadir L, et al. Hematologi Dan Onkologi. Wicaksono S, Binékada IMC, editors. Purbalingga; 2024.
81. Hafid AD, Rijal S, Arief E. Peran Imunoterapi Dalam Kanker Paru Mengenai Update Dan Tantangan : Literature Review. J Ners [Internet]. 2025;9(4):7453–61.
82. Yam JH, Taufik R. Hipotesis Penelitian Kuantitatif. 2021;3(2):96–102.
83. Lolang E. Hipotesisi Nol Dan Hipotesis Alternatif. J KIP. 2015;(3):685–95.

84. Nursalam. Metodologi Penelitian Ilmu Keperawatan Pendekatan Praktis. 4th ed. Lestari PP, editor. Jakarta: Salemba Medika; 2015.
85. Syahza A. Metodologi Penelitian. 2nd ed. Riau: UR Press Pekanbaru; 2021.
86. Heryana A. Populasi dan Sampel: Kerangka Sample Size , Sampling Frame , dan Sample Inclusivity pada Penelitian Kuantitatif – Juni 2024|. 2024;1–13.
87. Sinaga D. Statistik Dasar. Aliwar, editor. Jakarta: UKI PRESS; 2014.
88. Isfarudi I, Pd M, Suhardi DA, Si S, Canty A, Zamil F, et al. Metode Sampling. 2nd ed. Universitas Terbuka Hak; 2021.
89. Yusup F. Uji Validitas Dan Reliabilitas. J Tarb J Ilm Kependidikan. 2018;7(1):17–23.
90. Wuri I, Sari W, Rukmi DK, Yulaikhah L. Key Predictors for Reducing Chemotherapy-Induced Nausea and Vomiting Among Cancer Patients. 2025;226–33.
91. Untari DT. Buku Ajar Statistik 1. 1st ed. Wahyudi AR, Samhong MRT, editors. Purwokerto: Cv.Pena Persad; 2020.
92. Business LI of C&. Buku Panduan Kode Etik. Jakarta; 2022.
93. Nasional KEP dan PK. Pedoman dan Standar Etik Penelitian dan Pengembangan Kesehatan Nasional. 2017.
94. Lisa Rizky Amalia, Haryani, Wiwin Lismidiati. Faktor Penyebab Insiden Chemotherapy Induced Nausea and Vomiting (Cinv). J Mitrasehat. 2025;15(1):758–65.
95. Bustos M, Venkataramanan R, Caritis S. Nausea and Vomiting of Pregnancy-What's New? Physiol Behav. 2018;176(1):139–48.
96. Reis JC, Travado L, Antoni MH. International Journal of Clinical and Health Psychology Advancing health psychology research in oncology : Biobehavioral models , stress pathways , and stress-management interventions for cancer patients. Int J Clin Heal Psychol [Internet]. 2025;25(3):100615. Available from: <https://doi.org/10.1016/j.ijchp.2025.100615>
97. Sukhareva E V. The role of the corticotropin-releasing hormone and its receptors in the regulation of stress response. 2021;25(2):216–23.
98. Jin K, Lin X, Xia X, Ye H, Yang D, Fan Y, et al. Incidence and Risk Factors of Platinum-Based Chemotherapy-Induced Nausea and Vomiting: A Systematic Review and Meta-Analysis. Curr Oncol. 2025;32(6):1–24.

99. Hayashi M, Nakazawa K, Hasegawa Y, Horiguchi JUN, Miura D. Risk Analysis for Chemotherapy-induced Nausea and Vomiting (CINV) in Patients Receiving FEC100 Treatment. 2019;4314:4305–14.
100. Zhong W, Shahbaz O, Teskey G, Beever A, Kachour N, Venketaraman V, et al. Mechanisms of Nausea and Vomiting : Current Knowledge and Recent Advances in Intracellular Emetic Signaling Systems. 2021;
101. Saito Y, Watanabe T, Takekuma Y, Sakakibara-Konishi J, Shimizu Y, Kinoshita I, et al. Evaluating the potential to predict chemotherapy-induced nausea and vomiting in carboplatin-containing treatment based on symptoms induced by prior cisplatin-containing treatment. Sci Rep. 2026;1–9.
102. Cempaka AA, Dwi, Werdani YW, Sakoikoi MYP. Hubungan Usia Dan Tingkat Pendidikan Terhadap Stadium Pasien Kanker. 2024;100–5.
103. Srinatania D, Revy Citra Carlina. Penatalaksanaan Akupresur Dalam Mengatasi Masalah Mual Dan Muntah Akibat Kemoterapi Pada Anak Dengan Kanker Di Ruang Perawatan Hematologi Onkologi Thalasemia Rumah Sakit Hermina Pasteur. J Ilm Keperawatan (Scientific J Nursing). 2023;9(3):37–43.
104. Lee J, Dodd M. Review of Acupressure Studies for Chemotherapy-Induced Nausea and Vomiting Control. J Pain Symptom Manage [Internet]. 2008;36(5):529–44. Available from: <http://dx.doi.org/10.1016/j.jpainsymman.2007.10.019>
105. Sari IK, Morika HD, Amir AN, Nofia VR. Efektivitas Aromaterapi Peppermint Terhadap Penurunan Mual Dan Muntah Pada Anak Dengan Leukemia Limfoblastik Akut Pasca Kemoterapi. 2025;16(Desember):553–9.
106. Rosu G, Muresan EI, Spac AF, Diaconu M, Ciolacu DE, Danila A, et al. Aromatherapeutic and Antibacterial Properties of Cotton Materials Treated with Emulsions Containing Peppermint Essential Oil (Menthae piperitae aetheroleum). 2023;
107. Wiranti, Kiani ST. Pemberian Aromaterapi Peppermint Pada Asuhan Keperawatan Pasien Ca Mammae Post Kemoterapi Dengan Masalah Keperawatan Nausea. 2025;107–14.
108. Angelucci FL, Silva V V, Pizzol CD, Spir LG, Praes CEO, Maibach H. Physiological effect of olfactory stimuli inhalation in humans : an overview. 2014;117–23.
109. Jafarimanesh H, Akbari M, Hoseinian R, Zarei M, Harorani M. The Effect of Peppermint (Mentha piperita) Extract on the Severity of Nausea, Vomiting and Anorexia in Patients with Breast Cancer Undergoing Chemotherapy: A Randomized Controlled Trial. Integr Cancer Ther. 2020;19.

110. Sattayakhom A, Wichit S, Koomhin P. The Effects of Essential Oils on the Nervous System: A Scoping Review. *Molecules*. 2023;28(9):1–23.
111. Yuniarti RL, Solikhah FK, Sulastyawati, Ernawati N. Pengaruh Kombinasi Akupresur dan Aromaterapi Peppermint Terhadap Nausea Pada Pasien Post SC. 2024;10(01):7–15.
112. Hasanah A, Hariyani F, Pasiriani N, Murti NN. Akupresur P6 Dan Aromaterapi Peppermint Mengurangi Mual Ibu Hamil Trimester I Di RSUD Aji Batara Agung Dewa Sakti. 2023;1:601–10.
113. Santosa D, Fitrikasari A, Iswaningtyas F, Kuntardjo N, Tandarto K, Hadiati T, et al. Serotonin Levels and Chemotherapy-Induced Nausea and Vomiting in Cancer Patients. 2024;25:3263–7.
114. Kardiyudiani NK, Afrida M, Rahayu NW, Indriyani S, Quiambao BD. Pengaruh Profil Pasien Kanker yang Mendapat Kemoterapi dengan Chemotherapy Induced Nausea and Vomiting (CINV). *Ners Akad*. 2024;3(1):15–22.
115. Herrstedt J, Lindberg S, Clausager P. Prevention of Chemotherapy - Induced Nausea and Vomiting in the Older Patient : Optimizing Outcomes. *Drugs Aging* [Internet]. 2022;39(1):1–21.
116. Mu'awanah S, Ahsan, Windarwati HD. The Relationship Between Anxiety and Events Chemotherapy-Induced Nausea Vomiting (CINV) Breast Cancer Patients with Chemotherapy in. 2024;12(2):97–104.
117. Waqar SN, Mann J, Baggstrom MQ, Atif M, Chitneni P. Delayed nausea and vomiting from carboplatin doublet chemotherapy. 2016;55(6):700–4.
118. Huang X, Li X, Li J, Luo L, Chen H, Tan Y, et al. Chemotherapy - Induced Nausea and Vomiting in Breast Cancer Patients : A Multicenter Prospective Observational Study. 2021;
119. Davidson W, Teleni L, Muller J, Ferguson M, Mccarthy AL, Vick J. Malnutrition and Chemotherapy-Induced Nausea and Vomiting: Implications for Practice. 2012;39(4).
120. Arends J, Bachmann P, Baracos V, Barthelemy N, Bertz H, Bozzetti F, et al. ESPEN Guideline ESPEN guidelines on nutrition in cancer patients. *Clin Nutr* [Internet]. 2017;36(1):11–48. Available from: <http://dx.doi.org/10.1016/j.clnu.2016.07.015>
121. Shahid RK, Ahmed S, Le D, Yadav S. Diabetes and Cancer: Risk, Challenges, Management and Outcomes. 2021;1–21.
122. Yao F, He L, Sun X. Predictive factors of chemotherapy-induced nausea and vomiting in elderly patients with gynecological cancer undergoing paclitaxel and carboplatin therapy: A retrospective study. *Oncol Lett*. 2025;29(4):1–8.