

Research Article

Effectiveness of Autogenic Therapy on Post-chemotherapy Nauseous Vomit on Cervical Cancer Patients in Riau Pekanbaru

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ORCIDSri Utami: <https://orcid.org/0000-0003-1231-5838>**Abstract.**

Cervical cancer is a very high reproductive malignancy in women. One of the treatments to deal with the malignancy becoming severe is chemotherapy. Nausea and vomiting are signs of the most frequent symptoms caused by chemotherapy. Autogenic therapy is one of the nonpharmacological solutions to treat nausea and vomiting due to chemotherapists.

This study aims to determine the effectiveness of autogenic therapy to reduce symptoms of nausea and vomiting post-chemotherapy among patients with cervical cancer.

A quasi-experimental method with a pretest-posttest design was conducted post-chemotherapy on 40 patients of stage II and III cervical cancer. The research instrument used was the observation sheet for the assessment of nauseous vomit, namely the NRS assessment.

Demographic data revealed that the majority of patients were aged 46-55 years (40%), their education level was high school (40%) and they had undergone chemotherapy more than once (35%). The results showed that autogenic therapy significantly reduced nausea and vomiting in cervical cancer patients after chemotherapy (P value = 0.001). Based on the results of pretest and posttest observations, autogenic therapy can be used as a non-pharmacological treatment to reduce symptoms of nausea and vomiting post-chemotherapy in cervical cancer patients.

Autogenic therapy is recommended to reduce the symptoms of nausea and vomiting in post-chemotherapy of cervical cancer patients.

Keywords: autogenic therapy, chemotherapy, nausea and vomiting

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1. INTRODUCTION

In Indonesia, cervical cancer ranks the second place on most-diagnosed cancer on women with a number of cases of 2 per 100,000 population with an average death rate of 13.9 per 100,000 population (1). One of the measures that can be done to treat cervical cancer is chemotherapy². Chemotherapy is sometimes the first choice for treating cancer, given its systemic nature in ways that it can reach cancer cells that may have metastasized and therefore it is considered an effective therapy (3).

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Nauseous vomit is one of the chemotherapy side effects that often occurs in cervical cancer patients undergoing chemotherapy(4). Nauseous vomit occurs at the beginning of post chemotherapy treatment until a few days after chemotherapy depending on the type of chemotherapy drug used (5)Shinta & Surarso, 2016). Similar finding was reported that the side effects of chemotherapy physically in patients with cervical cancer. The study found that the nauseous vomit which occurs in chemotherapy patients appear at different times in each individual, and there are other factors such as taste, smell, thoughts, and anxiety related to chemotherapy which can aggravate nauseous vomit during cervical cancer chemotherapy treatment (6).

One of the non-pharmacological treatments that can be given to these post-chemo patients is autogenic therapy(7). Autogenic therapy is a relaxation method centered on oneself in the form of words or short sentences that can make their mind be more peaceful and comfortable (8). Autogenic relaxation can help the body perform an auto-suggestion mode to relax, so that when a person is relaxed and comfortable (9), it releases endorphins which function as natural antimetics and inhibit nauseous vomit impulses in the Chemore Trigger Zone (10)

The results of an initial on ten women with cervical cancer who were undergoing chemotherapy noted that patients complained that chemotherapy had many side effects on them. They experienced nauseous vomit, hair loss, decreased appetite and body weakness. They also admitted that nauseous vomit was the most common effect of chemotherapy and often occurred since the first chemotherapy session up to the tenth. Based on this phenomenon, the authors are interested in implementing an evident-based experiment, namely the effectiveness of autogenic therapy on reducing post chemotherapy nauseous vomit in cervical cancer patients in Arifin Achmad hospital, Riau Province.

2. OBJECTIVE

The purpose of this research is to measure the effectiveness of autogenic therapy for nauseous vomit post chemotherapy among cervical cancer patients in Riau Pekanbaru Indonesia.

3. METHOD OF RESEARCH

The study is quasi-experimental research using a pretest-posttest design. Forty participants in Arifin Achmad hospital serve as a sample on the application of autogenic

therapy on nauseous vomit post-chemotherapy on Stage II and III cervical cancer. The research instrument used was observation sheets for the assessment of nauseous vomit, namely NRS assessment.

Ethical Clearance number: 015/KEP/FK/2019

4. RESULTS

Demographic data shows that of 40 respondents, 40% aged 46-55 years, with education level at the high school which are 40.0%. 35% of participants are undergoing chemotherapy for twice.

4.1. Bivariate Analysis

Effectiveness of autogenic therapy

TABLE 1: The distribution of the frequency resulted from observation of nauseous vomit experienced by respondents before and after giving autogenic therapy.

Variable	Pre-test	Post-test
Nausea		
a. None	0	2
b. Mild	8	18
c. Moderate	22	16
d. Severe	10	4
Vomit		
a. None	0	8
b. Mild	22	16
c. Moderate	16	14
d. Severe	2	2

The table above shows that after two weeks of autogenic therapy, there was a decrease in the symptoms of post-nauseous vomit chemotherapy for cervical cancer patients. 16 people with moderate level of nausea (pre-test) decreases to to 14 people (post-test). Meanwhile, people with vomiting symptoms decreased from 22 people with mild level (pre-test) to 16 people (post-test).

The table above indicates that there is a decrease in symptoms of nauseous vomit for post cervical cancer chemotherapy patients after two weeks of autogenic therapy.

TABLE 2: Frequency distribution of the results observations before and after giving autogenic therapy.

Variable	N	Mean	Standard Intersection	Difference in means	P
Autogenic Relaxation					
a. Before Treatment	40	1,87	0,578	0,2	0,001
b. After Treatment	40	1,67	0,378		

Based on the results of the comparison of the pre-test and post-test above, it can be concluded that autogenic therapy can reduce symptoms of nauseous vomit resulted from post cervical cancer chemotherapy that has been given antimetic drugs.

5. DISCUSSION

Symptoms of nauseous vomit in cervical cancer patients post chemotherapy

Based on the results of study, it was found that most of the respondents indicated that after two weeks of autogenic therapy, there was a decrease in symptoms of post-chemotherapy nauseous vomit, as follows. The number of participants who reported moderate level of nausea decreased from 16 people (pre-test) to 12 people (post-test). The number of participants with vomiting symptoms with a mild level decreased from 16 people (pre-test) to 14 people (post-test).

Autogenic therapy can reduce symptoms of nauseous vomit resulted from post cervical cancer chemotherapy that has been given antimetic drugs.(11)

Autogenic relaxation can help the body perform an auto-suggestion mode to relax (12), so that when a person is relaxed and comfortable, it releases endorphins which function as natural antimetics and inhibit nauseous vomit impulses in the Chemore Trigger Zone (13)

This result supports another study which reported that the age of women who have a lot of cervical cancer, namely the age of 50-59 years, is 278 (42.9%) respondents (14), this is because the immune system has decreased and it affects a person's health condition (15). Other research also says that autogenic can make the body more relaxed (16)

6. CONCLUSION

Nauseous vomit is one of the most common symptoms that occurs on people who are undergoing cervical cancer chemotherapy which could affect the quality of life if not treated. Based on the results of pre-test and post-test observations, autogenic therapy can be used as a non-pharmacological treatment to reduce symptoms of nauseous vomit post chemotherapy in cervical cancer patients who have received medical treatment.

6.1. Declaration of conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of the article

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References

- [1] Ministry of Health RI. Buletin jendela dan informasi kesehatan. 2019. Retrieved on 6 June 2020 from <http://www.depkes.go.id/download.phpfile=downloadpusdatinuletinbuletin-kanker.pdf>
- [2] Sakila A, Wijayanegara H, Kusmiati M.
- [3] Hubungan antara karakteristik pasien dengan kejadian ca servix di rumah sakit Al-Islam Kota Bandung. Educational Proceedings Dr. 2014;2015;(581):694–699.
- [4] Junaidi I. Hidup sehat bebas kanker mewaspadaai kanker sejak dari dini. Yogyakarta: Rapha Publishing; 2014.
- [5] Shinta N, Surarso B. Terapi mual muntah pasca kemoterapi. THT Journal. 2016;9(2):74–83.
- [6] Ambarwati, Wardani N. Efek samping kemoterapi secara fisik pasien pada kanker serviks. Nurs J. 2014.
- [7] Syarif H, Nurachman E, Gayatri D. Terapi akupresur dapat menurunkan keluhan mual muntah akut akibat kemoterapi pada pasien kanker: randomized clinical trial. Indonesia Nursing J. 2011;2:2. Retrieved on 8 June 2020 from

- <http://jki.ui.ac.id/index.php/jki/article/view/321480> Terapi akupresur dapat menurunkan keluhan mual muntah akut akibat kemoterapi pada pasien kanker: randomized clinical trial. *Indonesia Nursing J.* 2011;2:2. Retrieved on June 2020 from <http://jki.ui.ac.id/index.php/jki/article/view/>
- [8] Purwoastuti, Walyani. *Asuhan kebidanan masa nifas dan menyusui*. Yogyakarta: New library of press; 2015.
- [9] Darviri, Christina. *Stress Management Techniques: Evidence-based procedures that reduce stress and promote health*. *Health Sci J.* 2011;5:(2). Retrieved on 7 June 2020 from www.hsj.gr/medicine/stress-management-techniques-evidence-based-procedures-that-reduce-stress-and-promote-health.php?aid=342
- [10] Gupta, K., Walton, R., & Kataria, S. P. (2021). Chemotherapy-Induced Nausea and Vomiting: Pathogenesis, Recommendations, and New Trends. *Cancer Treat Res Commun*, 26, 100278. <https://doi.org/10.1016/j.ctarc.2020.100278>
- [11] Melia. Hubungan antara frekuensi kemoterapi dengan status fungsional pasien kanker yang menjalani kemoterapi di RSUP Sanglah Denpasar. *J Cancer.* 2011;7(4):1-11.
- [12] Nasif, Junaidi, Muchtar. Efektifitas antimetik pada pasien yang menggunakan sitostatika pasca bedah pada berbagai jenis kanker di rumah sakit umum daerah dr. Achmad mochtar bukit tinggi. 2011. Retrieved on 6 June 2020 from jstf/article/viewFile/56/59
- [13] anuditya A. Hubungan antara pernikahan usia muda dengan kejadian kanker serviks di rsup dr. sardjito yogyakarta. 2018 Retrieved on 10 June 2020 from <http://eprints.poltekkesjogja.ac.id/1299/1/Aska%20Skripsi.pdf>
- [14] Rosaline MD, Suprabawati DA, Nihayati HE. Pengaruh autogenic dan hand-grip relaxation terhadap aspek fisik dan aspek psikologis, pada penderita kanker payudara yang menjalani kemoterapi. Retrieved on 7 June 2020 from <file:///C:/Users/hp/AppData/Local/Temp/127-Article%20Text-196-1-10-20181025.pdf>
- [15] Shinta N, Surarso B. Terapi mual muntah pasca kemoterapi. *THT Journal.* 2016;9(2):74–83.
- [16] Wijayanti dan Dyah. Relaksasi Autogenik Menurunkan Kecemasan Pasien Kanker Serviks. 2017. <http://ejournal.poltekkesdepkessby.ac.id/ojs/index.php/KEP/article/view/273>
- [17] Andrik Hermanto. Pengaruh Relaksasi
- [18] Autogenik Kombinasi Terapi Musik Religi terhadap kecemasan dan stress pada pasien Kanker Serviks yang menjalani Kemoterapi di Rumah Sakit Umum Dr. Saiful Anwal Malang. 2020.