

## THE EFFECTIVNESS OF DYADIC COPING SKILL TRAINING ON COPING, MARITAL SATISFACTION, AND PSYCHOLOGICAL ADJUSTMENT AMONG CANCER PATIENTS

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Artikel Diterima: 20 Oktober 2025, Direvisi: 25 Februari 2026, Diterbitkan: 1 Maret 2026

### ABSTRACT

**Introduction :** Cancer diagnosis and the treatment that must be carried out sometimes make the patients experience the psychological problem and less satisfaction in marriage. It does not only impact the patients but also their life partner. Therefore during the treatment period, the patients and their spouse are seen as one unity that influences each other. Dyadic coping is a coping formed altogether with the patients which emphasizes more on the interaction among the spouses and proven more effective in annulling the stressors. **Purpose :** The purpose of this research was to see the effectiveness of dyadic coping skill training intervention in cancer patients and their spouse in increasing the coping, marriage satisfaction, and psychological adjustment. **Method :** This research employed conceptual framework named The Systematic Transactional Model by Bodenmann. This research was a quantitative research with quasi experimental pre and post test design. The participants in this research were cancer patients and their spouse who were taking the therapy at Public Regional Hospital, Riau Province. The participants were selected by using purposive sampling based on the inclusion criteria. Total participants were 17 patients. The research instruments used in this research covered Dyadic Coping Inventory, Dyadic Adjustment Scale, and Benefit Funding Scale Indonesian Version which had been validated. **Results :** The analysis result showed that there was change of the average of dyadic coping score ( $p < 0.001$ ), marriage satisfaction ( $p < 0.001$ ), and psychological adjustment ( $p < 0.001$ ) in patients who had been given intervention of dyadic coping skill training. **Discussion :** This research proved that dyadic coping skill training intervention was effective in increasing the couple coping, marriage satisfaction, and psychological adjustment until it can be made as one holistic nursing intervention towards the patients' cancer.

**Keywords:** dyadic coping, marriage satisfaction, cancer patients.

## INTRODUCTION

Cancer is one of the most frightening disease in the world. Data from Global Cancer Statistic (GLOBOCAN) estimated around 20 million new cases of cancer in the year 2022 with 9.7 million deaths from cancer (Bray et al, 2024). The numbers found that approximately one in five men or women develop cancer in a lifetime, whereas around one in nine men and one in 12 women die from it.

In indonesia, there were over 408,661 new cases and nearly 242,099 deaths 347.792 (Globocan, 2022). Without intervention, the number of cases is projected to increase by 63% between 2025 and 2040, placing a significant burden on public healthcare systems and communities (Kementerian Kesehatan Republik Indonesia, 2025). In Riau province, there were 4.301 cancer patients which most of them were in productive age with advance stadiums of cancer (RSUD Arifin Ahmad, 2021).

Cancer treatment have evolved significantly, therefore cancer patients in advance stadiums have more chances to live longer. In the other side, living longer means the patient have to deal with more treatment and suffer more phisically and psychologically (Huda, et al, 2022). Moreover, dissatisfaction in marriage become the toughest issue have to be faced by the patient and the partner (Nalbant., Karger & Zimmermann, 2021). Previous research proved that the harmonious and support by the partner is highly important to neutralize psychological problems occur (Branchereau et al, 2025). But unfortunately, partners also run into high stress as it impact to the ability in support the partner (Huda, et al, 2021).

One of the factor influence patient's ability to neutralize phisical and psychological effects from the disease is the ability of coping. Based on previous research, it is proven that coping is a mediator between distress and stress of cancer patient with depression, anxiety, and quality of life (Huda & Chang, 2020).

Besides, coping also proved affecting functional status of the patient (Bitz, e al, 2020). The appropriate choice of coping is proven to strengthen the relationship of the patient and the partner (Huda, et al, 2021). In Indonesia, emotional support by the family and partner is one of the best source of coping to the patient (Lambert, et al, 2013). Therefore, the construction and appropriate coping strategy choosing to the patient and the partner will help cancer patient in solving phisical and psychological problems which might affect marital satisfaction.

Previous research has found that almost 80% of the patient's partner run into psychological problem. Coping they used is also limited and individuals. The result of qualitative analysis found a fact that the coping mostly use by cancer patient and the partner is spiritual experience. Patient tend to try to rebuild a good relationship with the partner and setting some new goals in life eith their partner. In the end, interventions in increase the coping of patient and the partner in facing cancer is highly needed (Porter, et al, 2019).

One appropriate intervention in improve the ability of coping for the patient and the partner is *dyadic coping* training (Monterosso, et al, 2019). The intervention of *dyadic coping* training is generally focus in improving the coping skills of patient and the partner deal with various problems caused by cancer. Previous research proves that this intervention can improve patient's quality of life, reduce stress, anxiety and depression (Porter, et al, 2019). Although dyadic coping training is effective in reducing psychological problems faced by cancer patient and their partner, the lack of access to peripheral areas and the need for a professional makes this intervention a little difficult to implement and has low *sustainability* (Huda et al, 2024).

By this, the researcher interested to design and develop a *dyadic coping training intervention* for cancer patient and the partner. This intervention was chosen because the easy access, low cost, and the

possibility of sustainability in society is quite high. Moreover, based on literature review, until now, there is no research found to examine the effectiveness of *dyadic coping* intervention training in Indonesia, so it can be assumed that this intervention is new and rarely conducted. In fact, this intervention is needed by cancer patient and the partner to help them deal with several problems. In addition, the topographical conditions of Riau which hard to reach, especially the coastal areas, leads *dyadic coping* training as the most appropriate alternative to improve the coping of the cancer patient in advanced stages and the partner.

The aim of this research was to see the effectiveness of dyadic coping skill training intervention in cancer patients in increasing the coping, marriage satisfaction, and psychological adjustment. This research soon could be a guide and reference in providing nursing care to improve the coping of the cancer patient and the partner. Then, this research also can be used as one alternative way to improve mental health and life quality of the cancer patient by coping strategy base. Furthermore, this research can be used as a basis for technological development and innovation related to interventions in optimizing mental health cancer patient in advanced stages and the partner.

## METHOD

This is quantitative research using *Quasy Experiment* design with a *pretest-posttest design without control group*. Sample in this study was cancer patients undergoing therapy at one referral Cancer hospital in Riau Province. The Data was collected in out patient ward from May to September, 2024. The number of samples used in this study were 17 people by using *purposive sampling* technique. The inclusion criteria are: cancer patients undergoing treatment who have a legal partner proven by their medical record and having *karnofski performance* scale of at least 60. The Indonesian Dyadic Coping

Inventory questionnaire was used to measure the dyadic coping. This instrument has a good validity with cronbach alpha 0.931 (Anggamsari & Andriani 2023). Dyadic Adjustment Scale and DASS 21 was also applied to explore marital satisfaction psychological adjustment. Those two instruments have also good validity with cronbach alpha = 0.80 and 0.91 respectively (Montesino et al, 2022; Hakim & Aristawati, 2023). Respondent will receive five intervention based on systemic transactional model. Those sessions include: being known each other, health education and management, dyadic coping, couple communication and problem focused training. Each session lasted around 30-45 minutes. The respondent could continue the next session if they already finished previous section. Paired t-tests and descriptive statistics were conducted to analyze the data.

The data gathered was primary data. After the data is collected, the data was analyzed using the SPSS version 21 program. Univariate and bivariate analysis used in this study. Descriptive statistics used to describe the demographic data. The Kolmogorov-Smirnov and Shapiro-Wilk test were used to check the distribution variables. Mean and SD will be presented with normally distributed continuous data, while median and range will also be used. Dependent sample T Test was used to identify differences between groups selected based on data assumptions.

## RESULT

Table 1 shows the result of the research on 17 respondents in which all respondents are female (100 %). Majority of respondents are on elementary school education (47 %), being housewife (76.4%) and muslim (76.47 %). The income of most respondents are below the regional minimum salary (82.35%) and most respondents suffered from Ca thyroid (47.05 %).

**Table 1**  
**Distribution Of Frequency Of Respondent Based On Demographical Characteristics**

Respondents' Characteristics	Experimental Group (n=17)	
	n	%
<b>Gender</b>		
a. Male	0	0
b. Female	17	100
<b>Pendidikan</b>		
a. Elementary School	8	47.05
b. Junior High School	5	29.4
c. Senior High School	2	11.7
d. College	2	11.7
<b>Occupation</b>		
a. Civil Servant	3	17.64
b. Farmer	1	5
c. Housewife	13	76.47
<b>Marriage Status</b>		
a. Marriage	17	100
b. Single	0	0
<b>Medical Diagnosis</b>		
a. Ca Tiroid	8	47.05
b. Ca mammae	7	41.17
c. Ca cervix	1	5
d. Ca tongue	1	5
<b>Religion</b>		
a. Moslem	13	76.47
b. Non moslem	4	23.52
<b>Income</b>		
a. Above or equal to UMR	3	17.64
b. Under UMR	14	82.35

The average of coping ability improvement after the dyadic coping skill training intervention with Sistemic Transactional Model based is on 22.08 point. The statistical test result show p value < 0.005. Hence, it is proven that the dyadic coping skill training intervention based on Sistemic Transactional Model effective improving coping ability. Showed at Table 2.

**Table 2**  
**Differences In Coping, Marital Satisfaction, And Psychological Adjustment On Cancer Patient Before The Dyadic Coping Skill Training Intervention With Sistemic Transactional Modelbase.**

Variable	SD	MD	P value
Coping	107.06	22.08	<0.001
Marriage Satisfaction	5.86	29.53	<0.001
Psychological adjustment	10.22	19.29	<0.001

In marital satisfaction variable, it is known that there is an improvement of average of the respondent as 29.53 point. Statistical result shows p value < 0.005 ( p value < 0.001). this shows that *dyadic coping skill training intervention with Sistemic Transactional Model base* is proven to increase marital satisfaction in patients.

In marital satisfaction variable, it is known that there is an average decrease in psychological problems (depression, anxiety, and stress) in respondents as 19.29 point. Statistical test result show p value < 0.005 ( p value < 0.001). This shows that *dyadic coping skill training intervention with Sistemic Transactional Model base* is proven to improve the ability of psychological adjustment to the respondent.

## DISCUSSION

According to the findings of 17 participants in this study, the majority of cancer patients were women, and the average age of cancer patients undergoing therapy was more than 50 years. This is consistent with the findings of a survey undertaken by Harahap, et. al. (2021) who discovered that 72% of cancer patients were women, and about a third of them were aged 52 and up. Women are twice as likely to get cancer as men. Those increases were

primarily due to increasing trends of breast cancer and thyroid cancer in women (American Cancer Society, 2025). Furthermore, this might be caused by the weakening of immune system due to age and genetic (Erckeling et al, 2021). Low education level and economic factors are also indirectly influenced cancer. Most of respondents were housewives and had elementary school education. This results are in line with the previous research that found lower educational attainment has related to with higher cancer mortality. Lower education level is mediator that affect the relationship between social determinant of health and the cancer incidence (Gupta et al, 2023).

*Dyadic stress* is a condition where an activity stimulates stress to patient or partner and affect both parties. The main reason could come from disharmony of the relationship between patient and the partner or caused by mental stress suffered by one side as it indirectly affect the relationship. Cancer diagnosis and the treatment is one of determinants factor which trigger of dyadic stress. Cancer not only threatened all aspect of patient's life but also their spouse (Crangle et al, 2019). The ability of their spouse in handling their problems during the cancer journey's will help patient's to construct an appropriate coping.

This research found that dyadic coping skill training intervention could improve dyadic coping and marital satisfaction. This is in accordance with the research conducted by Chen et al (2023) that stated that *dyadic coping* intervention could improve coping partners on both parties (patient and their spouse). In stressful condition, patient and the spouse will select various coping strategy whether individual coping or dyadic coping. This action can minimize negative consequences which caused by cancer diagnoses and its treatments (Batista et al, 2024). As it compared to individual coping, the use of dyadic coping has been proven

not only increase patient's coping ability but also their spouse while dealing with the stressor. They seem like an interactive solid team in facing their problem rather than as a separate individual which lead them react as a unit rather than as individuals. Communication and supportive dyadic coping might strengthen marital bonds, alleviate couples' stress, and facilitate mental wellbeing (Chen et al, 2021). Therefore, interventions which focus on improving dyadic coping will increase patient's coping and increase their marital satisfaction. Since our intervention consist of any education and encouragement to select dyadic coping for spouse and the patients, the communication become more intense and construct a good team which make improvement in their dyadic coping.

This study found that a dyadic coping skills training intervention could improve patients' psychological adjustment among cancer patients. This results in line with previous meta analysis study which stated that intervention focused on improving dyadic coping could accelerate patient's ability and adaptation to the cancer diagnosis. Those situation directly help them to adjust their psychological problems by reducing distress and depression (Stefanu et al, 2020; Weißflog et al, 2017).

Since the dyadic coping can create interdependence between patients and their spouse, share their feeling and construct the common goals, the patients and their partners will solve their problem together. It then create the emotional balance (Kayser et al, 2019). Therefore, interventions which focus on dyadic coping will increase patient's ability and their spouse in dealing with their emotions. Our intervention dyadic coping skill training that support the interdependence between patients and their spouse by some program entitled being known each other, increased problem focused coping and couple communication. Those believed can decrease stress, depression and anxiety.

## CONCLUSION

Research conducted on cancer patients undergoing therapy showed that dyadic coping skills training intervention based on systemic transactional theory was proven to increase dyadic coping, marital satisfaction and psychological adjustment. It can be concluded that the couple-based dyadic coping intervention has a positive impact on accelerating dyadic coping, marital satisfaction and psychological adjustment. . Therefore, this intervention can be used as an alternative nursing intervention in increasing patients –spouse coping, marital satisfaction and psychological adjustment among cancer patients.

## SUGGESTION

This therapy can be used as the insight and the newest information source in the administration of spouse coping skill improvement (dyadic coping) of cancer patients. The hospital is expected to apply this therapy as the implication of nursing intervention among cancer patients. This research would be basic reference for the future research which focus on improving dyadic coping among cancer patients.

## ACKNOWLEDGEMENT

The authors would like to thank all participants for their generous participation in this study and Association of Indonesian Nurse Education Centre (AINEC) for the research funding under AINEC Research Award 2023.

## REFERENCES

Bitz, C., Kent, E., E., Clark, K., Loscalzo, M. (2020). Couples coping with cancer together: Successful implementation of a caregiver program as standard of care. *Psycho-Oncology*. 2020;29(5), 902–909.  
<https://doi.org/10.1002/pon.5364>

Boyes, A., W., Girgis, A., D'Este, C., Zucca, A., C. (2011). Flourishing or floundering? Prevalence and correlates of anxiety and depression among a

population-based sample of adult cancer survivors 6months after diagnosis. *Journal of Affective Disorders*. 2011;135(1-3), 184–192.  
<https://doi.org/10.1016/j.jad.2011.07.016>

Branchereau M, Dutheil S, Le-Borgne M, Rapicault C, Lamelot-Pelard J, Bilodeau K, Broc G, Franck H, Porro B. Patient-partner support for breast cancer survivors: a cross-sectional comparative study assessing the effects on emotional distress, coping, perceived control, and perceived social support. *Support Care Cancer*. 2025;33(5):431.doi:10.1007/s00520-025-09381-1.

Bray, F., Laversanne, M., Sung, H., Ferlay, J., Siegel, R. L., Soerjomataram, I., & Jemal, A. (2024). Global cancer statistics 2022: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA: a cancer journal for clinicians*, 74(3), 229–263.  
<https://doi.org/10.3322/caac.21834>

Brenner, H., Hoffmeister, M., Stegmaier, C., Brenner, G., Altenhofen, L., & Haug, U. (2007). Risk of progression of advanced adenomas to colorectal cancer by age and sex: Estimates based on screening colonoscopies. *Gut*. 56(1). 1585-1589.

Chen, M., Gong, J., Lin, C., Luo, H., & Li, Q. (2023). A couple-based dyadic coping intervention for couples coping with colorectal cancer: A pilot feasibility study. *European journal of oncology nursing : the official journal of European Oncology Nursing Society*, 63, 102226.  
<https://doi.org/10.1016/j.ejon.2022.102226>.

Crangle, C. J., Torbit, L. A., Ferguson, S. E., and Hart, T. L. (2019). Dyadic coping mediates the effects of attachment on quality of life among couples facing ovarian cancer. *J. Behav. Med.* 43, 564–575. doi: 10.1007/s10865-019-00096-3

- Creswell, J., W. (2013). *Qualitative Inquiry & Research Design: Choosing among Five Approaches* (3rd ed.). Thousand Oaks, CA: SAGE.
- Dame, L, Hoebeke, R. (2016). Effects of a simulation exercise on nursing students' end-of-life care attitudes. *The Journal of nursing education*, vol. 55, pp. 701–705. <https://doi.org/10.3928/01484834-20161114-07>
- Ferrell, B., Malloy, P., Mazanec, P., Virani, R. (2018). CARES: AACN's New Competencies and Recommendations for Educating Undergraduate Nursing Students to Improve Palliative Care. *Journal of Professional Nursing*, vol. 32, no. 5, pp. 327-333. <https://doi.org/10.1016/j.profnurs.2016.07.002>
- Harahap, R., Pohan, P., & Sufitni, S. (2021). Characteristics of Thyroid Cancer Patients in Haji Adam Malik General Hospital. *Indonesian Journal of Cancer*, 15(3), 112-116. doi:<http://dx.doi.org/10.33371/ijoc.v15i3.744>
- Harju, E., Rantanen, A., Helminen, M., Kaunonen, M., Isotalo, T., & Åstedt-Kurki, P. (2022). The marital relationship and health-related quality of life of prostate cancer patients and their spouses: A prospective, longitudinal study. *International journal of nursing practice*, 28(6), e13093. <https://doi.org/10.1111/ijn.13093>
- Hertzog, M., A. (2008). Considerations in determining sample size for pilot and RCT studies. *Research in Nursing and Health*. 2008;31(2), 180–191. <https://doi.org/10.1002/nur.20247>
- Huda, N., Chang, H., J. (2020). Coping and functional status among advanced cancer patient in Indonesia. *Annals Of Oncology*. 2020;(31) suppl\_6: S1355-S1357. <https://doi.org/10.1016/j.annonc.2020.10.284>
- Huda, N., Yun-Yen, Deli, H., Shaw, M., K., Huang, T., W., Chang, H., J. (2021). Mediation of Coping Strategies among Patients with Advanced Cancer. *Clinical nursing research*. 2021b; 30(8), 1153–1163. <https://doi.org/10.1177/10547738211003276>
- Huda, N., Shaw, M., Chang, H., J. (2021). Psychological Distress Among Patients With Advanced Cancer: A Conceptual Analysis. *Cancer nurs*. 2021. 10.1097/NCC.0000000000000940. *Advance Online Publication*. <https://doi.org/10.1097/NCC.0000000000000940>
- Huda, N., Lin, Y., K., Shaw, M., K., Chang, H., J. (2021). Psychometric properties of the Indonesian version of the brief COPE in a sample of advanced cancer patients. *Annals Of Oncology*. 2021c;(32) suppl\_5. Volume 32 S1275. DOI: <https://doi.org/10.1016/j.annonc.2021.08.683>
- Huda, N., Shaw, M., K., Lin, Y., Yu, W., Chang, H., J. (2022). Psychological distress and problem list among patients with advanced cancer: A comparative study of Indonesia and Taiwan. *Research Square* 2022. DOI: 10.21203/rs.3.rs-945338/v1.
- Huda N, Erwin, Woferst R, Gautama MSN. The impact of dyadic coping intervention on mental health problem and quality of life in female cancer patients. *Malays J Nurs*. 2024;16(1):243-50. doi:10.31674/mjn.2024.v16i01.025.
- International Agency for Research on Cancer, World Health Organization. Global Cancer Observatory: GLOBOCAN 2022: estimated cancer incidence, mortality and prevalence worldwide in 185 countries [Internet]. Lyon (FR): IARC; 2022 [cited 2026 Feb 24]
- Jiang, S., Liu, P., L. (2020). Digital divide and internet health information seeking among cancer survivors: a trend

- analysis from 2011 to 2017. *Psycho-Oncology*. 2020;29(1):61-67
- Jogja cancer registry. Laporan Registry kanker berbasis rumah sakit; (2018). Retrieved from <https://canreg.fk.ugm.ac.id/laporan-data/registrasi-kanker-berbasis-rumah-sakit-dr-sardjito-fkkmk-ugm/rkbr-oktober-2018/>
- Kayser, K., Acquati, C., Reese, J. B., Mark, K., Wittmann, D., and Karam, E. (2019). A systematic review of dyadic studies examining relationship quality in couples facing colorectal cancer together. *Psychooncology* 27, 13–21. doi: 10.1002/pon.4339
- Kementerian Kesehatan Republik Indonesia. Kasus kanker diprediksi meningkat 70 persen pada 2050, Kemenkes perkuat deteksi dini [Internet]. Jakarta: Kemenkes RI; 2025 [cited 2026 Feb 24].
- Lafaye, A., Petit, S., Richaud, P., Houédé, N., Baguet, F., & Cousson-Gélie, F. (2014). Dyadic effects of coping strategies on emotional state and quality of life in prostate cancer patients and their spouses. *Psycho-oncology*, 23(7), 797–803. <https://doi.org/10.1002/pon.3483>
- Lambert, S., D., Girgis, A., Lecathelinais, C., Stacey. (2013). Walking a mile in their shoes: anxiety and depression among partners and caregivers of cancer survivors at 6 and 12 months post-diagnosis. *Support care in cancer*. 2013;21(1), 75–85. <https://doi.org/10.1007/s00520-012-1495-7>
- Lazarus, R., S., Folkman, S. (1984). *Stress, Appraisal, and Coping*. New York, NY: Springer Publishing.
- Li, Q., and Loke, A. Y. (2014). A literature review on the mutual impact of the spousal caregiver-cancer patients dyads: 'communication', 'reciprocal influence', and 'caregiver-patient congruence'. *Eur. J. Oncol. Nurs.* 18, 58–65. doi: 10.1016/j.ejon.2013.09.003
- Monterosso, L., Platt, V., Bulsara, M., Berg, M. (2019). Systematic review and meta-analysis of patient reported outcomes for nurse-led models of survivorship care for adult cancer patients. *Cancer treatment reviews*. 2019;73:62-72
- Nalbant B, Karger A, Zimmermann T. Cancer and relationship dissolution: perspective of partners of cancer patients. *Front Psychol*. 2021;12:624902.doi:10.3389/fpsyg.2021.624902.
- Noveiri, M., Shamsaei, F., Khodaveisi, M., Vanaki, Z., Tapak, L. (2021). The concept of coping in male spouses of Iranian women with breast cancer: A qualitative study using a phenomenological approach. *Canadian oncology nursing journal*. 2021;31(3), 314–321. <https://doi.org/10.5737/23688076313314321>
- Oemiati, R., Rahajeng, E., & Kristanto, A.Y. (2011). Prevalensi tumor dan beberapa faktor yang mempengaruhinya di Indonesia. *Badan Penelitian Dan Pengembangan Kesehatan*. 39(4). 190-204.
- Porter, L., S., Samsa, G., Steel, J., L., et al. (2019). Caregiver-guided pain coping skills training for patients with advanced cancer: Background, design, and challenges for the CaringPals study. *Clinical Trials Regulation*. 2019;16(3):263-272. doi:10.1177/1740774519829695
- Reid, J., Scott, D., Santin, O., et al. (2014). Evaluation of a psychoeducational intervention for patients with advanced cancer who have cachexia and their lay carers (EPACaCC): study protocol. *Journal Of Advanced Nursing*. 2014;70(5):1174-1183. doi:10.1111/jan.12268.
- Rottmann, N., Hansen, D. G., Larsen, P. V., Nicolaisen, A., Flyger, H., Johansen, C., et al. (2015). Dyadic coping within couples dealing with breast cancer: A longitudinal, population-based

- study. *Health Psychol.* 34, 486–495.  
doi: 10.1037/hea0000218
- RSUD Arifin Ahmad. (2021). *Jumlah pasien kanker*; Medial Record.Tidak dipublikasikan.
- Ștefănuț, A. M., Vintilă, M., & Tudorel, O. I. (2021). The Relationship of Dyadic Coping With Emotional Functioning and Quality of the Relationship in Couples Facing Cancer-A Meta-Analysis. *Frontiers in psychology, 11*, 594015.  
<https://doi.org/10.3389/fpsyg.2020.594015>
- Tagai, E., K., Miller, S., M., Hudson, S., V., et al. (2021). Improved cancer coping from a web-based intervention for prostate cancer survivors: A randomized controlled trial. *Psycho-Oncology.* 2021;30(9):1466-1475.  
doi:10.1002/pon.
- Traa, M. J., De Vries, J., Bodenmann, G., & Den Oudsten, B. L. (2015). Dyadic coping and relationship functioning in couples coping with cancer: a systematic review. *British journal of health psychology, 20*(1), 85–114.  
<https://doi.org/10.1111/bjhp.12094>
- Wang, T., Molassiotis, A., Chung, B., Tan, J., Y. (2018). Unmet care needs of advanced cancer patients and their informal caregivers: a systematic review. *BMC Palliat Care.* 2018;17(1), 96. <https://doi.org/10.1186/s12904-018-0346->
- Weißflog, G., Hönig, K., Gündel, H., Lang, D., Niederwieser, D., Döhner, H., et al. (2017). Associations between dyadic coping and supportive care needs: findings from a study with hematologic cancer patients and their partners. *Support Care Cancer* 25, 1445–1454. doi: 10.1007/s00520-016-3541-3
- Yodang. (2018). *Buku ajar keperawatan paliatif berdasarkan kurikulum AIPNI 2015*. Jakarta; Trans Info Media.
- Cuenca Montesino, M. L., Graña Gómez, J. L., Peña Fernández, M. E., & Andreu Rodríguez, J. M. (2013). Psychometric properties of the Dyadic Adjustment Scale (DAS) in a community sample of couples. *Psicothema, 25*(4), 536–541.  
<https://doi.org/10.7334/psicothema2013.85>
- Gupta, A., Wilson, L. E., Pinheiro, L. C., Herring, A. H., Brown, T., Howard, V. J., & Akinyemiju, T. F. (2023). Association of educational attainment with cancer mortality in a national cohort study of black and white adults: A mediation analysis. *SSM - population health, 24*, 101546.  
<https://doi.org/10.1016/j.ssmph.2023.101546>
- Eckerling, A., Ricon-Becker, I., Sorski, L. et al. Stress and cancer: mechanisms, significance and future directions. *Nat Rev Cancer* 21, 767–785 (2021).  
<https://doi.org/10.1038/s41568-021-00395-5>.
- Ventura Batista, J. P., Cardoso, F. D. S., Ribeiro de Oliveira, A. C., & Gomes da Silva, S. (2024). Stress symptoms occur in patients undergoing chemotherapy treatment independently of the level of physical activity. *The International journal of neuroscience, 1–4*. Advance online publication.  
<https://doi.org/10.1080/00207454.2024.2336190>.
- Meizhen Chen, Jiali Gong, Qian Cao, Xingjuan Luo, Jieyu Li, Qiuping Li, A literature review of the relationship between dyadic coping and dyadic outcomes in cancer couples, *European Journal of Oncology Nursing, Volume 54,2021,102035, ISSN 1462-3889, https://doi.org/10.1016/j.ejon.2021.102035.*  
(<https://www.sciencedirect.com/science/article/pii/S1462388921001411>)