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A Reduction in Stress is Associated with a Decrease in Chemotherapy Symptoms: An Integrative Literature Review

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A Reduction in Stress is Associated with a Decrease in Chemotherapy Symptoms

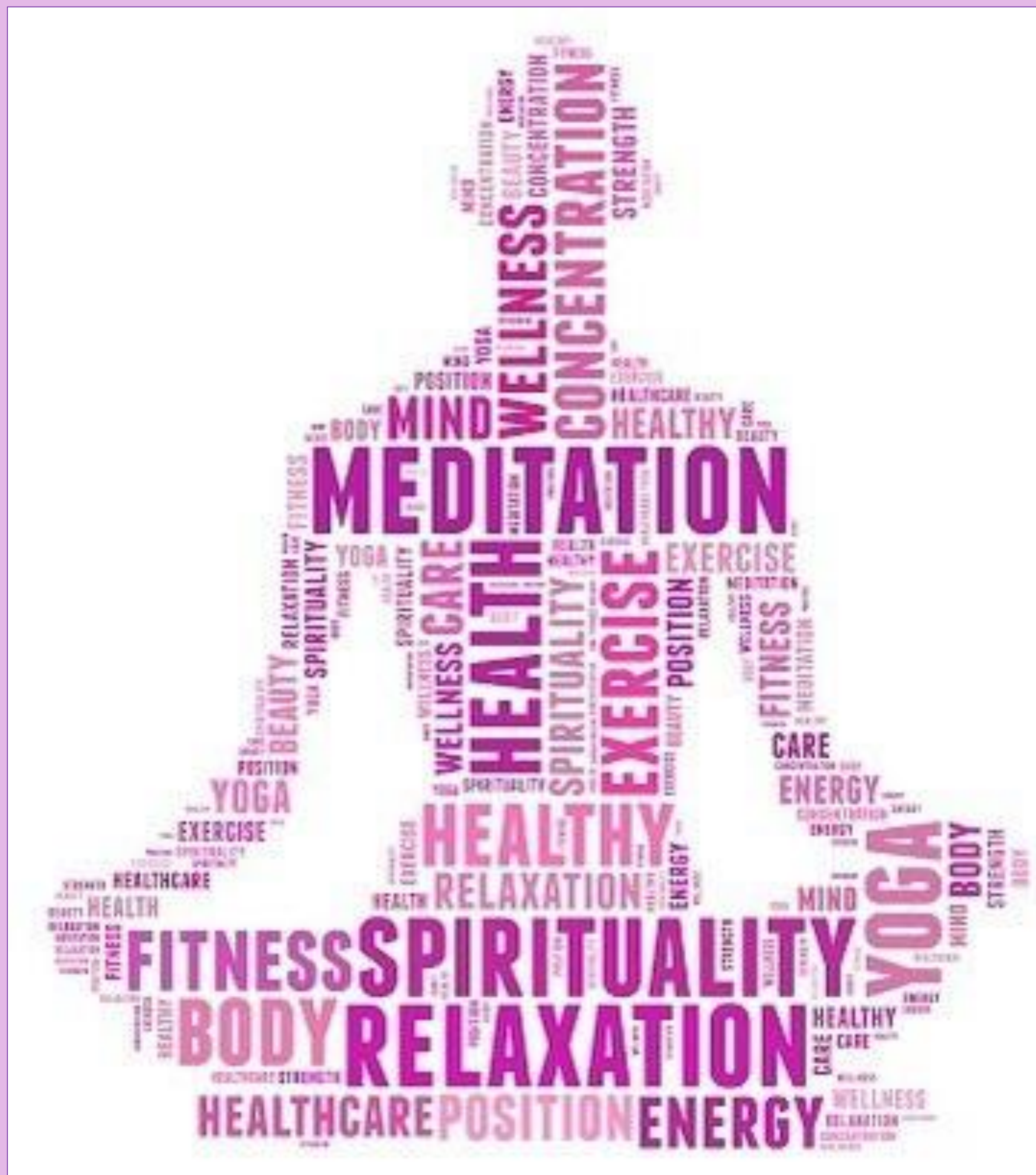


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BACKGROUND

The National Cancer Institute estimated 1,685,210 new cases of cancer will be diagnosed in the US in 2016. Chemotherapy is one of the top treatment options, and approximately 650,000 people receive chemotherapy every year in the US. Literature suggests that when individuals with cancer are stressed, it can affect their tumors' ability to grow and spread due to a weakened immune system. The American Psychological Association suggested that stress levels have increased over time. Awareness and the education of the effect that stress has on cancer therapy can play a role in how patients perceive the importance of stress reducing activities.



PURPOSE

To determine if reducing stress in cancer patients results in a positive effect on chemotherapy symptoms. If so, what types of stress reduction techniques are of benefit?

METHODOLOGY

The design of this study is an integrative literature review aimed at discovering whether there is a direct correlation between stress and chemotherapy symptoms. Literature was obtained from three databases that included PubMed, CINAHL Complete, and ProQuest Nursing. Sources were gathered which included the key terms (a) *stress*, (b) *chemotherapy*, and (c) *cancer*.

RESULTS

Symptoms, such as nausea, were reported to give patients anxiety and stress causing other symptoms such as palor, weakness and sweating. This resulted in negative impacts on chemotherapy outcomes because treatment became difficult to face. Distressed emotional states often generate problems such as sleep difficulties, fatigue, and pain. This can affect treatment by impairing cognition, weakening motivation, and decreasing coping abilities. An increase in Pranayama, yoga breathing, resulted in improved symptoms and quality of life scores. Statistically, sleep disturbances, anxiety, and mental quality of life improved significantly. An increase of relaxation, awareness of tension, and getting needs met was found when patients coupled exercise with self-directed stress management. Patients who watched a psycho-educational video focusing on positive reappraisal, education, and relaxation content had a lower distress level compared with a control group. Patients involved in a group providing guided imagery and progressive muscle relaxation had a decrease in anxiety and depression.



NURSING CONSIDERATIONS

It is the responsibility of healthcare providers to help patients through their cancer treatments with the least possible amount of adverse effects. Nurses should be educated on what interventions have been found to be beneficial and which ones have not. Offering stress management suggestions to patients based on their individual lifestyles is critical in helping the patient.

CONCLUSION

All individuals who are undergoing chemotherapy experience some type of negative effect. Stress reducing interventions offer cancer patients the option to alleviate some of these symptoms. In return, the chemotherapy outcomes and treatment compliance are increased. Patients may be able to go through chemotherapy treatment with fewer negative effects and live a more normal life. Education was found to be key in achieving this.



REFERENCES

Charalambous, A., Giannakopoulou, M., Bozas, E., & Paikousis, L. (2015). A randomized controlled trial for the effectiveness of progressive muscle relaxation and guided imagery as anxiety reducing interventions in breast and prostate cancer patients undergoing chemotherapy. *Evidence-Based Complementary & Alternative Medicine*, 20151-10; Dhruva, A., Miaskowski, C., Abrams, D., Acree, M., Cooper, B., Goodman, S., & Hecht, F. M. (2012). Yoga breathing for cancer chemotherapy-associated symptoms and quality of life: results of a pilot randomized controlled trial. *Journal of Alternative & Complementary Medicine*, 18(5), 473-479; Rodrigues, A., Peres de Oliveira, P., Ferreira, L., Manzan, C., Araujo, I., & Hiratsuka, M. (2016). Stress in patients submitted to drug therapy. *Journal of Research: Fundamental Care*, 8(2), 4487-4500. doi: 10.989/2175-5361.2016.v8i2