
Department of Nursing papers and presentations

9-29-2015

Exercise and Hospitalized Leukemia Patients

Anne Delengowski, RN, MSN, AOCN

Department of Nursing, Thomas Jefferson University Hospital, anne.delengowski@jefferson.edu

Justine O'Connor, RN, MSN, OCN

Department of Nursing, Thomas Jefferson University Hospital, justine.oconnor@jefferson.edu

Megan Stinsman, RN, BSN, OCN

Department of Nursing, Thomas Jefferson University Hospital, megan.stinsman@jefferson.edu

Kate McHenry, RN, BSN, OCN

Department of Nursing, Thomas Jefferson University Hospital, kate.mchenry@jefferson.edu

Kaitlin Mostak, RN, BSN

Department of Nursing, Thomas Jefferson University Hospital, kaitlin.mostak@jefferson.edu

Follow this and additional works at: <https://jdc.jefferson.edu/dnpp>

See next page for additional authors

 Part of the [Nursing Commons](#)

[Let us know how access to this document benefits you](#)

Recommended Citation

Delengowski, RN, MSN, AOCN, Anne; O'Connor, RN, MSN, OCN, Justine; Stinsman, RN, BSN, OCN, Megan; McHenry, RN, BSN, OCN, Kate; Mostak, RN, BSN, Kaitlin; Silcox, RN, MSN, JoAnn; Sweeney, RN, Colleen; Muldoon, RN, BSN, OCN, Christine; and Gilbride, RN, BSN, Lauren, "Exercise and Hospitalized Leukemia Patients" (2015). *Department of Nursing papers and presentations*. Paper 16.

<https://jdc.jefferson.edu/dnpp/16>

This Article is brought to you for free and open access by the Jefferson Digital Commons. The Jefferson Digital Commons is a service of Thomas Jefferson University's [Center for Teaching and Learning \(CTL\)](#). The Commons is a showcase for Jefferson books and journals, peer-reviewed scholarly publications, unique historical collections from the University archives, and teaching tools. The Jefferson Digital Commons allows researchers and interested readers anywhere in the world to learn about and keep up to date with Jefferson scholarship. This article has been accepted for inclusion in Department of Nursing papers and presentations by an authorized administrator of the Jefferson Digital Commons. For more information, please contact: JeffersonDigitalCommons@jefferson.edu.

Authors

Anne Delengowski, RN, MSN, AOCN; Justine O'Connor, RN, MSN, OCN; Megan Stinsman, RN, BSN, OCN; Kate McHenry, RN, BSN, OCN; Kaitlin Mostak, RN, BSN; JoAnn Silcox, RN, MSN; Colleen Sweeney, RN; Christine Muldoon, RN, BSN, OCN; and Lauren Gilbride, RN, BSN

INTRODUCTION

- Acute leukemia patients experience numerous physical and emotional symptoms during induction chemotherapy.
- Exercise might relieve some symptom distress and has been shown to improve sleep patterns and quality of life.
- The National Comprehensive Cancer Network Distress Thermometer, a validated tool which measures psychological, social, and spiritual aspects of care was used.

OBJECTIVE

The purpose of this study was to determine if patients in a structured, monitored walking program experienced less symptom distress than patients receiving the usual standard of care during induction chemotherapy.

METHODS

- Prospective design.
- Thirty subjects were randomized into the intervention or control groups.
- Patients completed the NCCN Symptom Distress Thermometer.

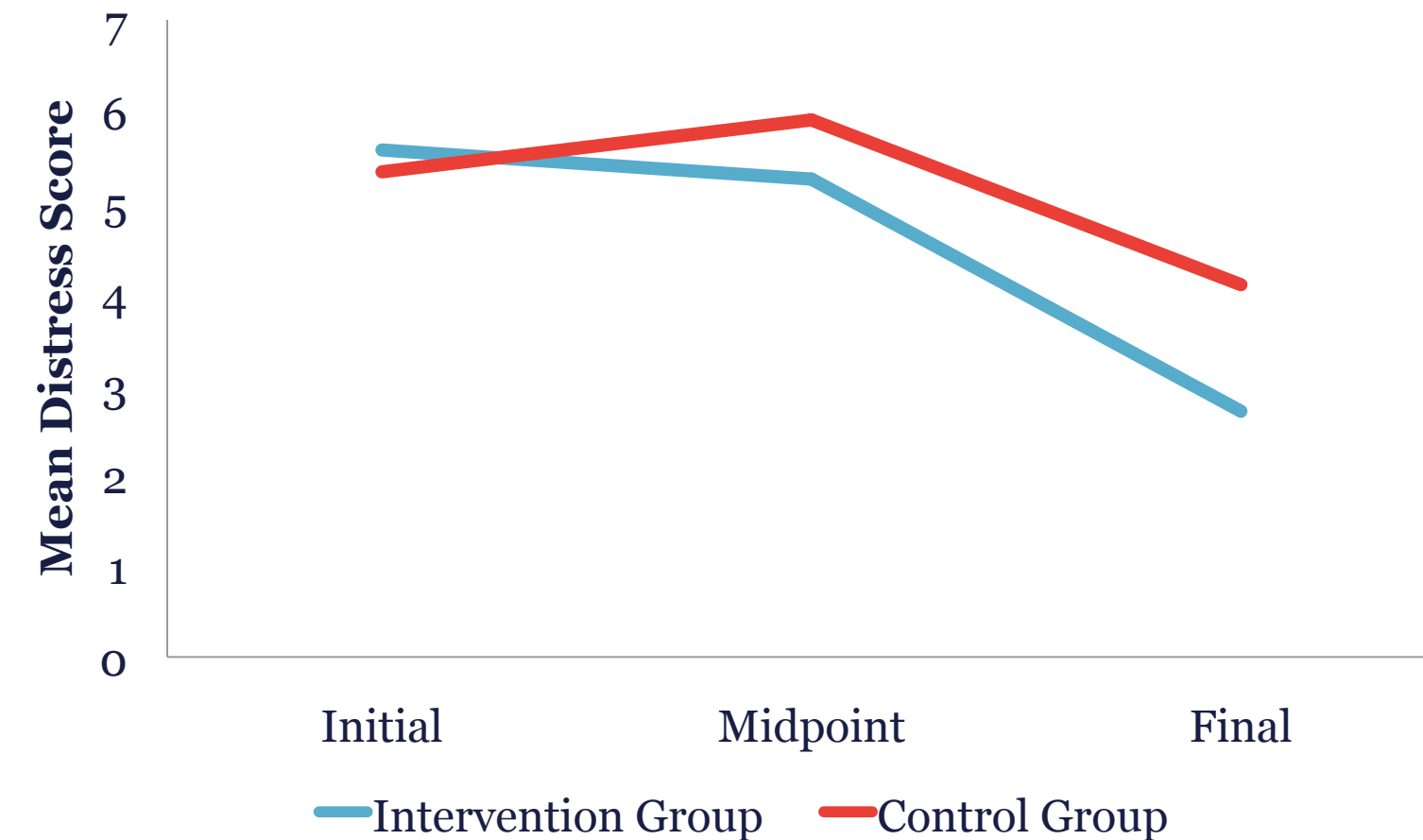
Intervention Walking Program

- Educational materials on the importance of exercise
- Presentation on benefits of exercise
- Provided a pedometer to measure distances walked
- Given a motivational calendar with "historical milestones"

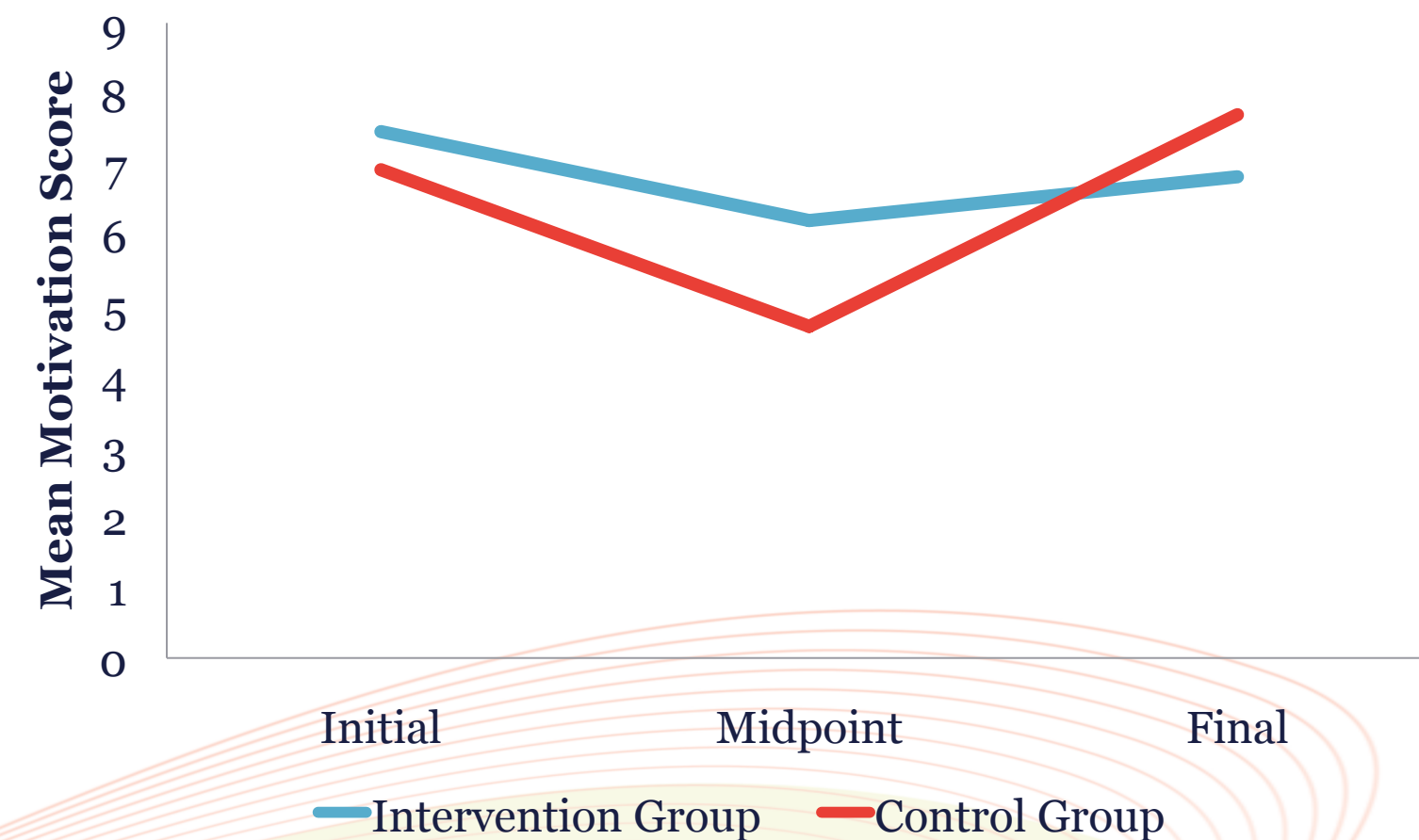
Control Standard of Care

- Ambulation as tolerated
- Independently performed by patient

RESULTS



A repeated measures ANOVA revealed a significant decrease in distress scores over time, regardless of group ($F = 10.76, p = 0.001$). However, distress scores were not significantly different between the two groups ($F = 0.334, p = 0.714$).



A repeated measures ANOVA revealed a significant change in motivation scores over time, regardless of group ($F = 8.52, p = 0.003$). However, motivation scores were not significantly different between the two groups ($F = 2.31, p = 0.13$).

CONCLUSION

- Improvement in distress in both the intervention and control groups.
- As a result, staff is encouraging patients to increase their ambulation.
- Study limitations include: limited sample size and placebo effect. Patients enrolled in the study may have been more motivated to increase their ambulation.

NEXT STEPS

- Investigate causes of distress using the same NCCN Symptom Distress Thermometer Tool.
- Expand this study to include a larger population of cancer patients.

REFERENCES

- Hacker, E., Larson, J. L., & Peace, D. (2011). Exercise in Patients Receiving Hematopoietic Stem Cell Transplantation: Lessons Learned and Results From a Feasibility Study. *Oncology Nursing Forum*, 38(2), 216-223.
- Hanna, L., Avila, P., Meteer, J., Nicholas, D., & Kaminsky, L. (2008). The effects of a comprehensive exercise program on physical function, fatigue, and mood in patients with various types of cancer. *Oncology Nursing Forum*, 35(3), 461-469.
- Holland, J. C. & Bultz, B. D. (2007). The NCC guideline for Distress Management: A case for making distress the sixth vital sign. *Journal of National Comprehensive Cancer Network*, 5, 3-7.
- Mitchell, A. J. (2010). Short screening tools for cancer-related distress: A review and diagnostic validity meta-analysis. *Journal of the National Comprehensive Cancer Network*, 8, 487-494.
- Young-McCaughan, S., Mays, M.Z., Arzola, S.M., Yoder, L.H., Dramiga, S.A., Leclerc, K.M., Nowlin, M.U. (2003). Change in exercise tolerance, activity, and sleep patterns, and quality of life in patients with cancer participating in a structured exercise program. *Oncology Nursing Forum*, 30, 441-454.

ACKNOWLEDGEMENTS

The research reported here was supported by a grant from The Daisy Foundation. A special thank you to all of the medical oncology nursing staff for their contributions.