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Exercise and Hospitalized Leukemia Patients

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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.

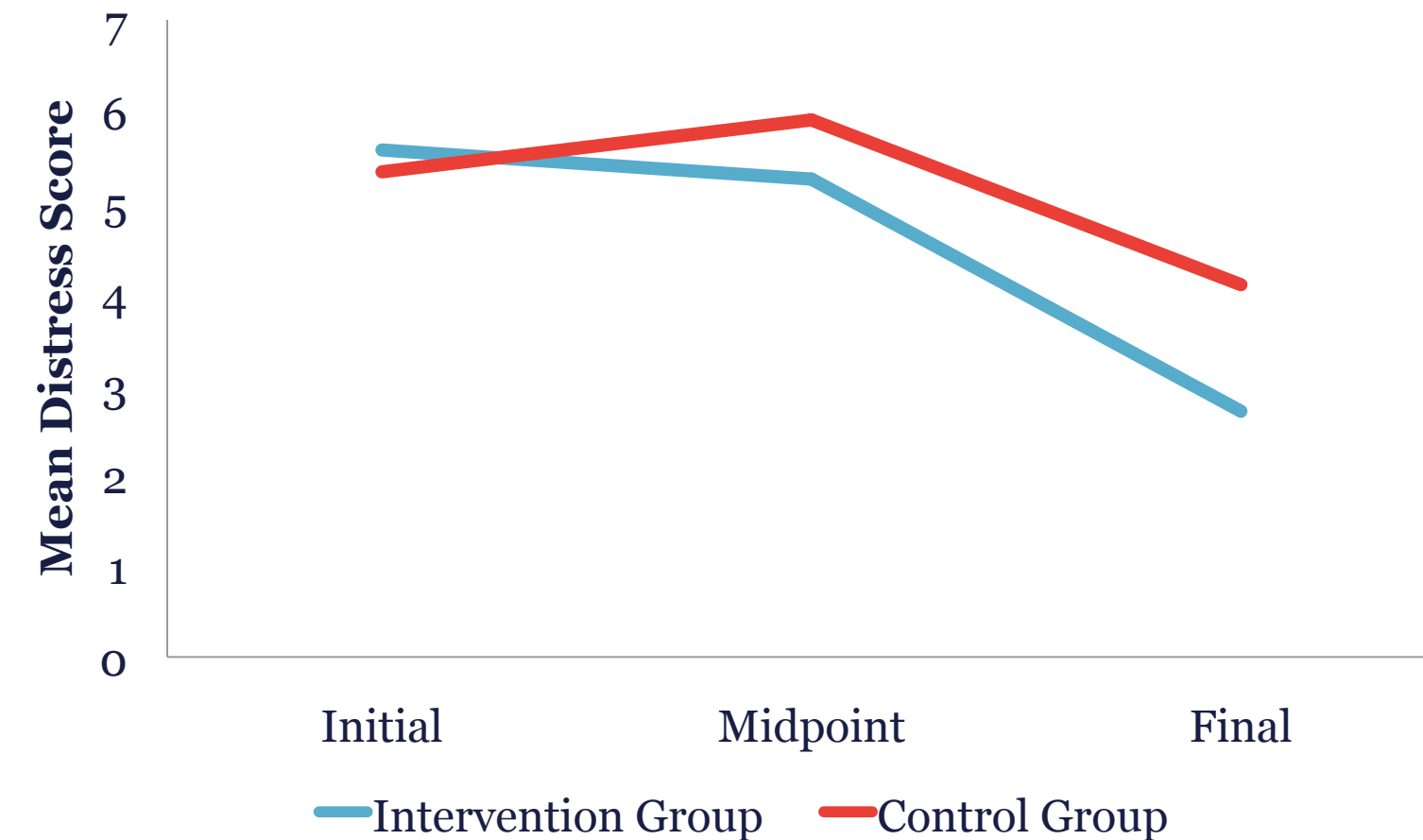
Intervention Walking Program

- 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"

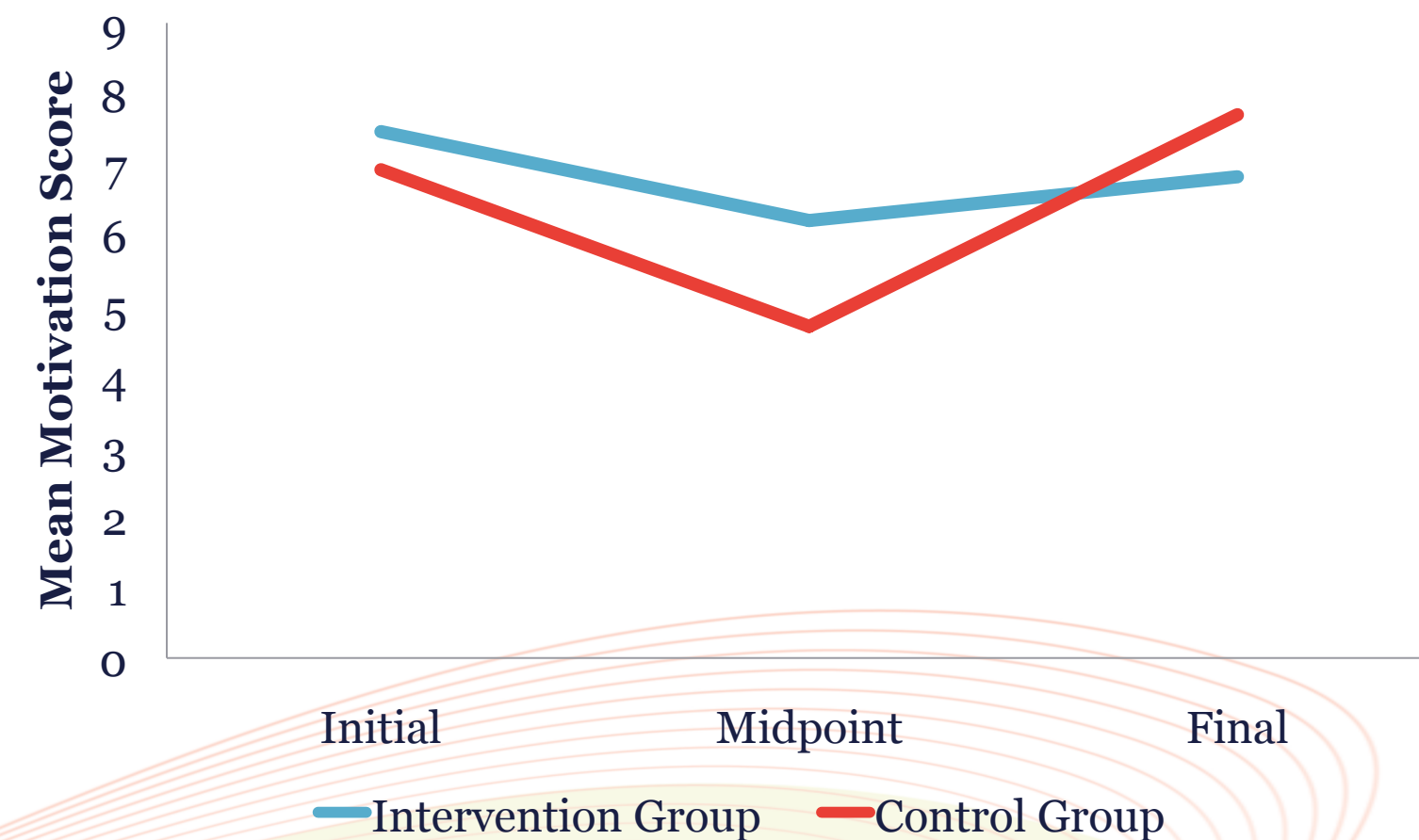
Control Standard of Care

- 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.

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