

persist after treatment

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INTRODUCTION

Multiple studies have reported on health-related quality of life (HRQOL) in patients with metastatic neuroendocrine neoplasms (NENs) but little is known of the prevalence of long-term symptoms in patients with non-metastatic NEN following completion of primary cancer treatment. ¹

We sought to understand the HRQOL of patients with non-metastatic NENs who were followed for surveillance in the Gastrointestinal Survivorship Clinic (GISC) at the University of California, San Francisco (UCSF).

METHODS

Patients were seen in UCSF GISC every 3-6 months and completed NCCN Questionnaire prior to each appointment. Questionnaire was used to guide clinical care.

Self-reported HRQOL measures - fatigue, depression and anxiety, pain, sexual function, sleep, mental focus, exercise, and bowel function were obtained via the National Comprehensive Cancer Network (NCCN) Survivorship Assessment Questionnaire. ²

Responses to questions were either yes/no or rated 0 to 10, with a score of 10 being the worst.

Fatigue, anxiety, and pain were evaluated independently over time and compared by gender, age (<50, >=50), and exercise frequency (<150 min/week, >150 min/week).

Associations between patient characteristics and HRQOL were tested using linear mixed models fit to repeated measures within the patient, and by Pearson Chi-squared.

RESULTS

- ❖ 82 patients completed 312 NCCN questionnaires from 2016 to 2024.
- ❖ All patients were diagnosed with a localized neuroendocrine neoplasm and were undergoing surveillance after completion of treatment.

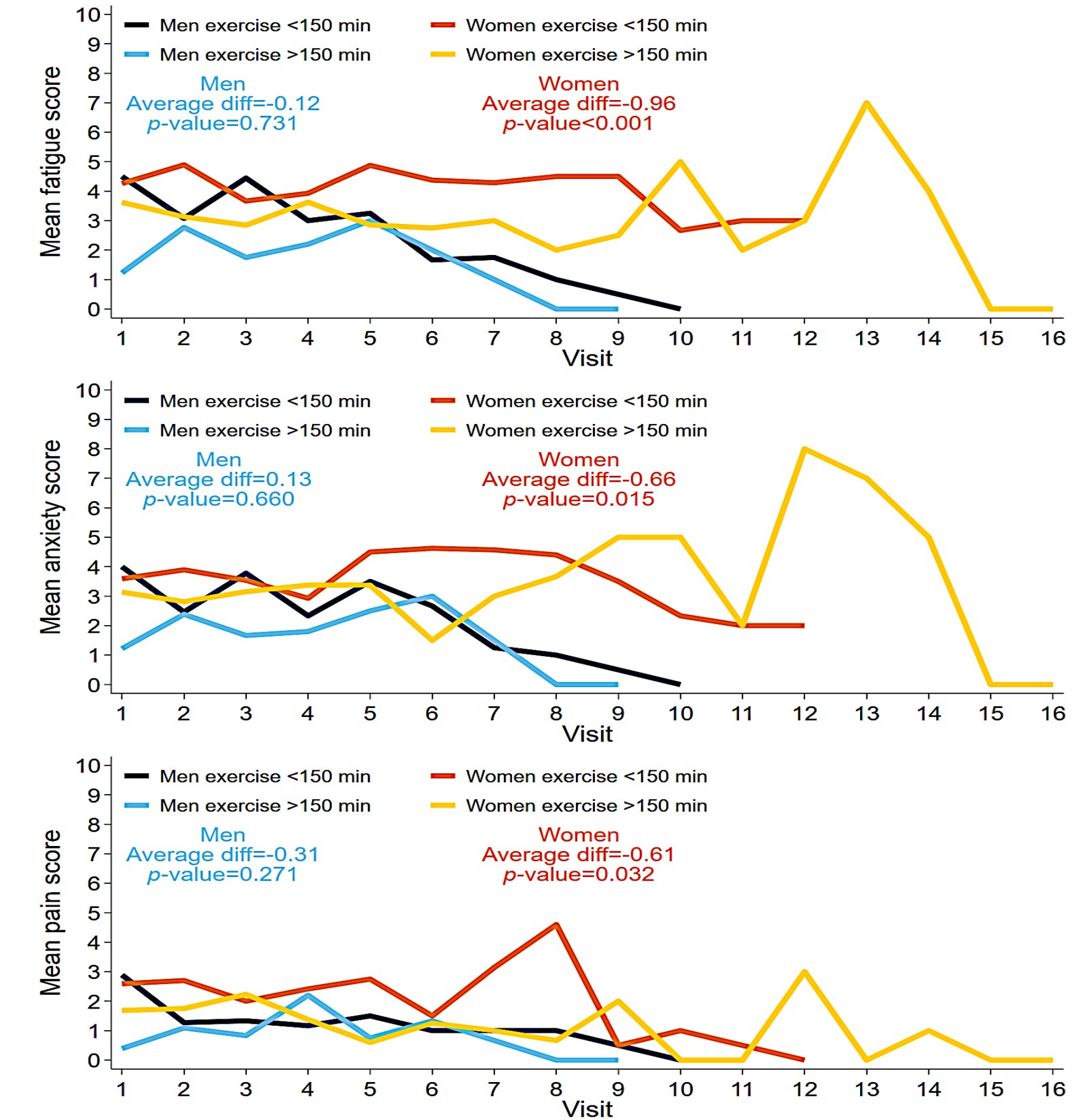
Patient Characteristics	N=82 (%)
Male	42
Female	58
Median Age	63
Pancreatic Primary	32
Non-white	33
White	67
English Speaking	99

Questionnaire results at Baseline visit	% of patients reporting
Fatigue	35
Pain	28
Sleep	44
Anxiety	18
Exercising >150 min/week	57

- ❖ Over subsequent visits, women experienced worse fatigue (p=0.007), anxiety (p=0.023), and pain (p=0.019) compared to men.
- ❖ **By age, there was no difference in fatigue and anxiety, however, patients aged <50 reported worse pain (p=0.011).**
- ❖ **Women exercising >150 min/week reported improvement in fatigue (p=<0.001), anxiety (p=0.015) & pain (p=0.032).**
- ❖ In men, exercise did not have a significant impact on fatigue, anxiety, or pain.

CONCLUSION

- ❖ Despite completing primary cancer treatment, patients with NENs continued to report ongoing HRQOL issues which persisted over time.
- ❖ Fatigue, anxiety, and pain were worse in women but reported better in women who exercised. While there is a correlation between improved HRQOL and exercise, causation has not been established. Despite the observed results **only 57% of patients reported exercising >150 min/wk.**
- ❖ As healthcare providers, we need to recognize that patients may continue to have ongoing issues after treatment. We must educate and support patients in adopting healthy lifestyle interventions such as exercise to improve HRQOL and overall health outcomes.
- ❖ These findings demonstrate the importance of multidisciplinary survivorship care tailored to the individual with a focus on lifestyle interventions including exercise.



References 1. Beaumont, J et al Pancreas 2012 2. https://www.nccn.org/professionals/physician_gls/pdf/survivorship.pdf
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