

The Effects Of The COVID-19 Pandemic On Depression And Fatigue In Men Being Treated For Prostate Cancer

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ABSTRACT

Introduction: The COVID-19 pandemic stressed the mental health of many with state shutdowns and restrictions/modifications of daily living activities. Those that are at increased risk of depression, such as prostate cancer patients, could be impacted more than others. Thus, the objective of this study is to investigate if depression scores increased in prostate cancer patients during the pandemic compared to the year prior.

Methods: Oregon Urology Institute (OUI) has been following patients treated for prostate cancer since 2008. Patients are asked to fill out Expanded Prostate Index Composite (EPIC) questionnaires at regular intervals post treatment. Each patient rated the feeling of being depressed and fatigue on a scale of 0-4. Patients were divided into two cohorts, ones treated via prostatectomy vs radiation. Years assessed are defined as: pre COVID for 2019 and COVID for 2020. A non-parametric, Wilcoxon rank sum test with continuity correction was used due to non-normal paired data and scores for depressed feeling and lack of energy were compared for each cohort separately.

Results: In total, 345 patients' depression scores were analyzed for 2019 and 2020. Radiation cohort consisted of 199 patients and the surgery cohort consisted of 146 patients. There was no significant difference whether patients felt depressed in 2019 vs 2020 regardless of cohort (radiation $P = 0.6710$ and surgery $P = 0.0678$). No significant difference whether radiation or surgery patients lack energy in 2019 vs 2020 ($P = 0.0840$ and $P = 0.3079$, respectively).

Conclusion: There were no significant differences in depression scores (i.e., feeling depressed or lack of energy) in 2019 compared to 2020 for prostate cancer patients regardless of whether they were treated with radiation or surgery.

OBJECTIVE

The objective of this study is to investigate if depression scores increased in prostate cancer patients during the pandemic compared to the year prior.

INTRODUCTION

The COVID-19 pandemic stressed the mental health of many with state shutdowns and restrictions/modifications of daily living activities. Those that are at increased risk of depression, such as prostate cancer patients, could be impacted more than others.

STUDY DESIGN

Oregon Urology Institute (OUI) has been following patients treated for prostate cancer since 2008. Patients are asked to fill out Expanded Prostate Index Composite (EPIC) questionnaires at regular intervals post treatment. Each patient rated the feeling of being depressed and fatigue on a scale of 0-4. Patients were divided into two cohorts, ones treated via prostatectomy vs radiation. Years assessed are defined as: pre COVID for 2019 and COVID for 2020.

A non-parametric, Wilcoxon rank sum test with continuity correction was used due to non-normal paired data and scores for depressed feeling and lack of energy were compared for each cohort separately.

RESULTS:

In total, 345 patients' depression scores were analyzed for 2019 and 2020. Radiation cohort consisted of 199 patients and the surgery cohort consisted of 146 patients.

There was no significant difference whether patients felt depressed in 2019 vs 2020 regardless of cohort (radiation $P = 0.6710$ and surgery $P = 0.0678$, Fig 1).

No significant difference whether radiation or surgery patients lack energy in 2019 vs 2020 ($P = 0.0840$ and $P = 0.3079$, respectively, Fig 2).

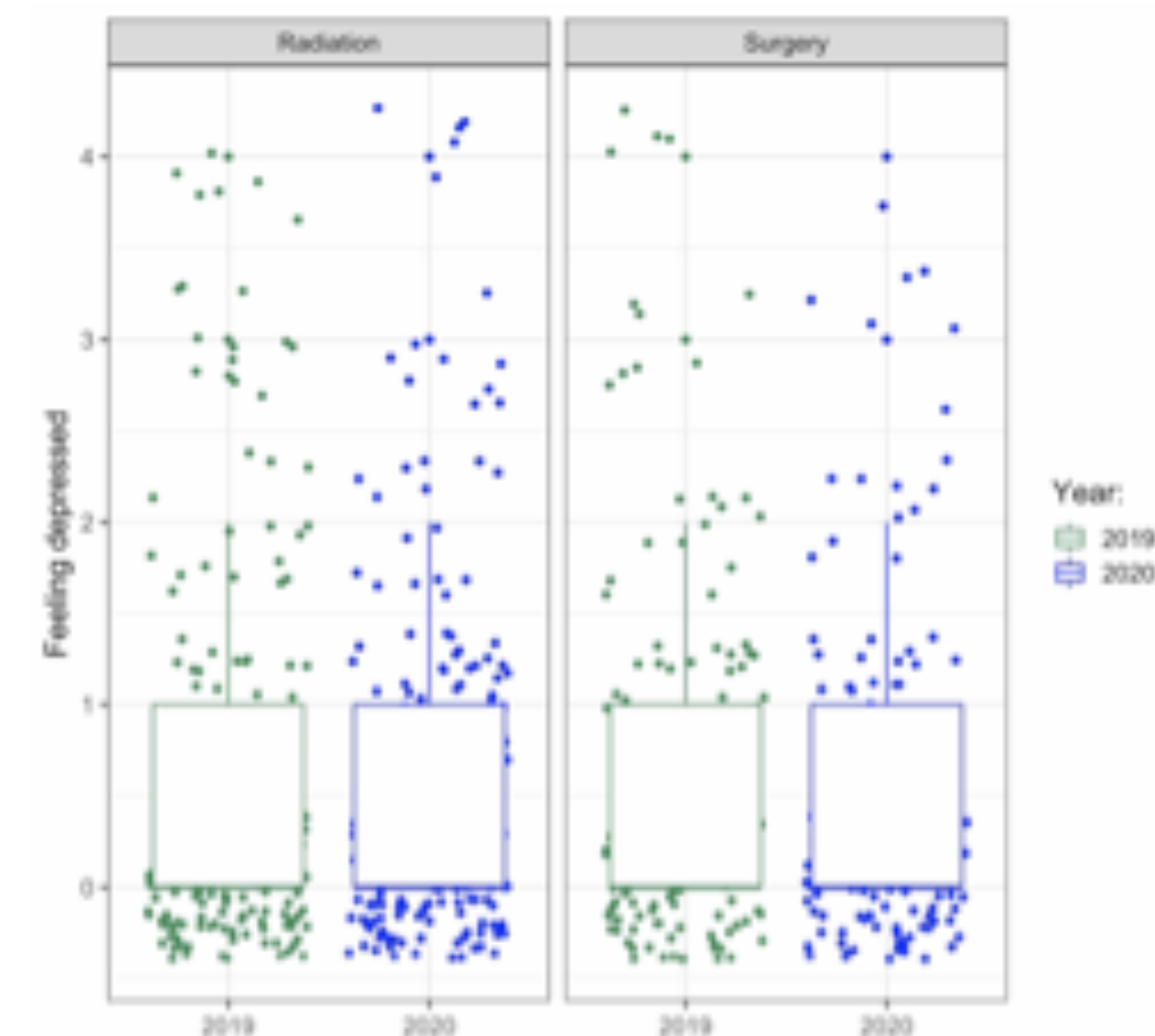


Figure 1 Summary of the changes of depressed feelings prior Covid19 (2019, sea green) compared to post 1 year (2020, blue) for each treatment (radiation and surgery) separately.

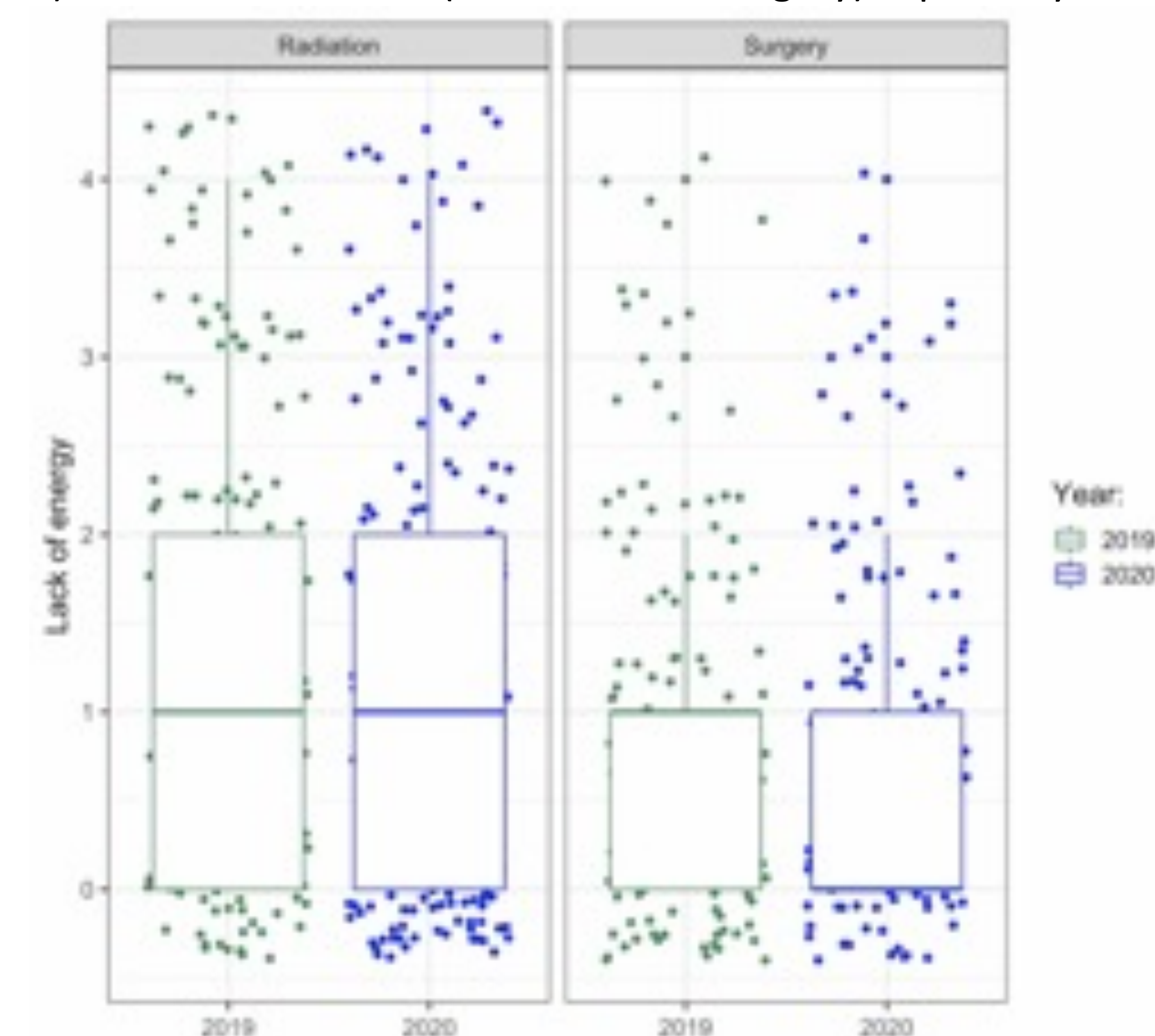


Figure 2 Summary of the changes in lack of energy prior Covid19 (2019, sea green) compared to post 1 year (2020, blue) for each treatment (radiation and surgery) separately.

DISCUSSION

- There were no significant differences in depression scores (i.e., feeling depressed or lack of energy) in 2019 compared to 2020 for prostate cancer patients regardless of whether they were treated with radiation or surgery.
- The patients filled out a generic survey that was created well before COVID-19 so answers may have changed if a qualifier was put in the survey specifically about how COVID-19 has impacted them.
- The patients were compiled from a large group of those being treated but by stratifying the patients based on demographics such as race and economic status, there may in fact be an increase in depression and fatigue scores

LIMITATIONS

Data based off patients in one clinic in one geographical location (Pacific Northwest, Oregon)

CONCLUSION

No statistical difference was found between pre and post COVID-19 depression/fatigue scores for men being treated for prostate cancer at the Oregon Urology Institute.

FUTURE PROJECTS

This data could be continuously analyzed up until current day as the pandemic has continued into 2021 and is still ongoing. This data could also be expanded to patients with other diagnosis/diseases to see how the pandemic has impacted others.

ACKNOWLEDGEMENTS

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