

Introduction

Taste change is a common side effect of Radiotherapy (RT) for Head and Neck Cancer (HNC), significantly affecting quality of life (1)(2) and nutrition(3) especially during and immediately post RT, with a largely varying recovery time. Therefore, the aim of this study was to evaluate the feasibility of using a weekly online survey to measure taste change post RT for HNC patients to inform better support.

Methods

We aimed to recruit twenty patients who reported taste change at a cancer centre, had an email address, and access to internet for this prospective observational study from January to May 2023. The survey was delivered by email weekly for eight weeks post RT. Patients were dropped from the study if they did not complete the survey two weeks in a row.

The four survey questions were modified from the MD Anderson Symptom Inventory – Head and Neck (MDASI-HN) (Figure 1) used in a previous study (4) and addressed change in taste, related distress, current diet status and perception of whether their taste has improved.

Feasibility was evaluated using recruitment (patients recruited/eligible patients) and retention (survey completion over eight weeks) data. Secondary outcomes of change in taste and distress were analysed using descriptive statistics and considered in relation with demographic and treatment data.

This project was reviewed and approved by the local Research and Development Office and categorized as a service improvement project.

Question 1
I have problems tasting my food
0 – Not at all
10 – As bad as you can imagine
Please select: 0 1 2 3 4 5 6 7 8 9 10

Question 2
How much has this bothered you?
0 – Not at all
10 – As bad as you can imagine
Please select: 0 1 2 3 4 5 6 7 8 9 10

Question 3
What are you able to eat at the moment?
 Normal diet (3)
 Soft diet (2)
 Liquids only (1)
 I have my food through a feeding tube (0)

Question 4
Do you think your sense of taste has improved since finishing radiotherapy?
 Yes (1)
 No (0)

*Scoring for Q3 and Q4 indicated by number in bracket.

Figure 1. Modified MDASI-HN

The number of patients that felt an improvement in their taste increased from 50% to 75% from week 1 to week 8. This was accompanied by an improvement in tasting food by an average of 3.87 (Scale 0-10, Question 1 on survey). However, distress associated with taste change only increased by 2.33 at the end of 8 weeks (Question 2 on survey).

Only two patients reported no improvement in sense of taste over the 8 weeks. Only one patient was reliant upon tube feeding in week 8, all other patients were eating either a soft or normal diet.

Results

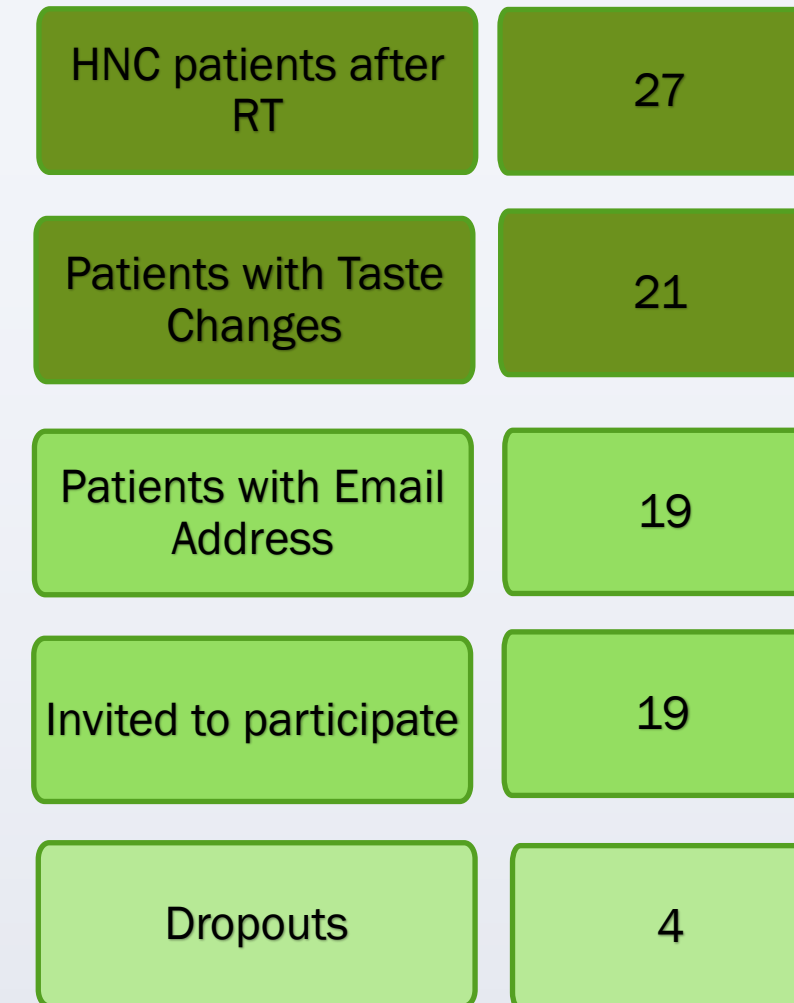


Figure 2. Recruitment and Retention

Of the 19 patients recruited, 79% (n=15) finished the study (Figure 2) and completion rate for the survey was 98.33%. Therefore, we consider it feasible to measure taste change post RT in HNC patients through a weekly online survey.

Twenty-one patients were eligible, of which nineteen had an email address and access to internet. Of the nineteen patients approached, all gave their consent to participate. Two dropped out without completing any surveys and a further two patients dropped out in week 3 and 6 respectively.

Most patients were male (n=14), between 51-60 years (n=7), and were treated for oropharyngeal cancer.

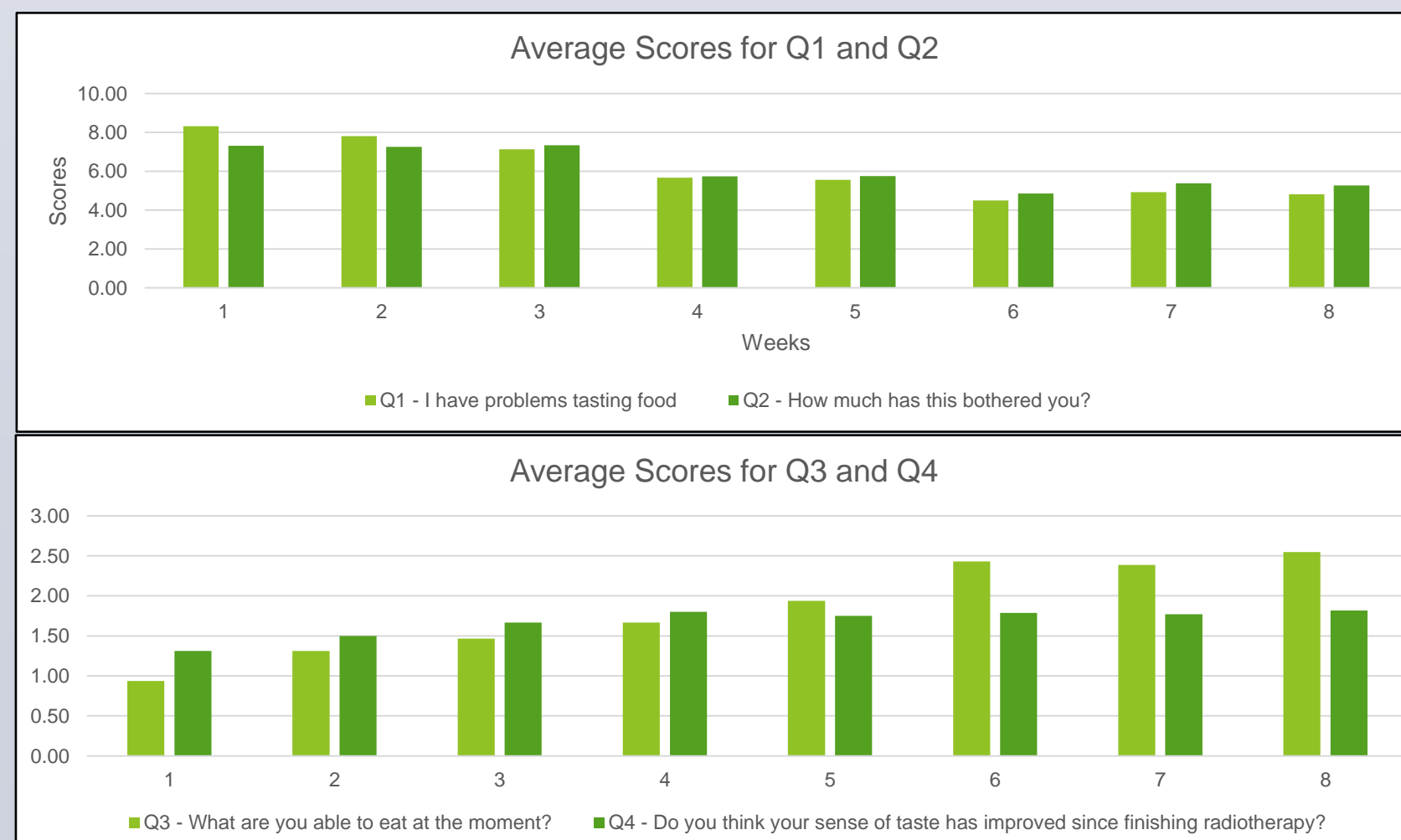


Figure 3. Survey Data

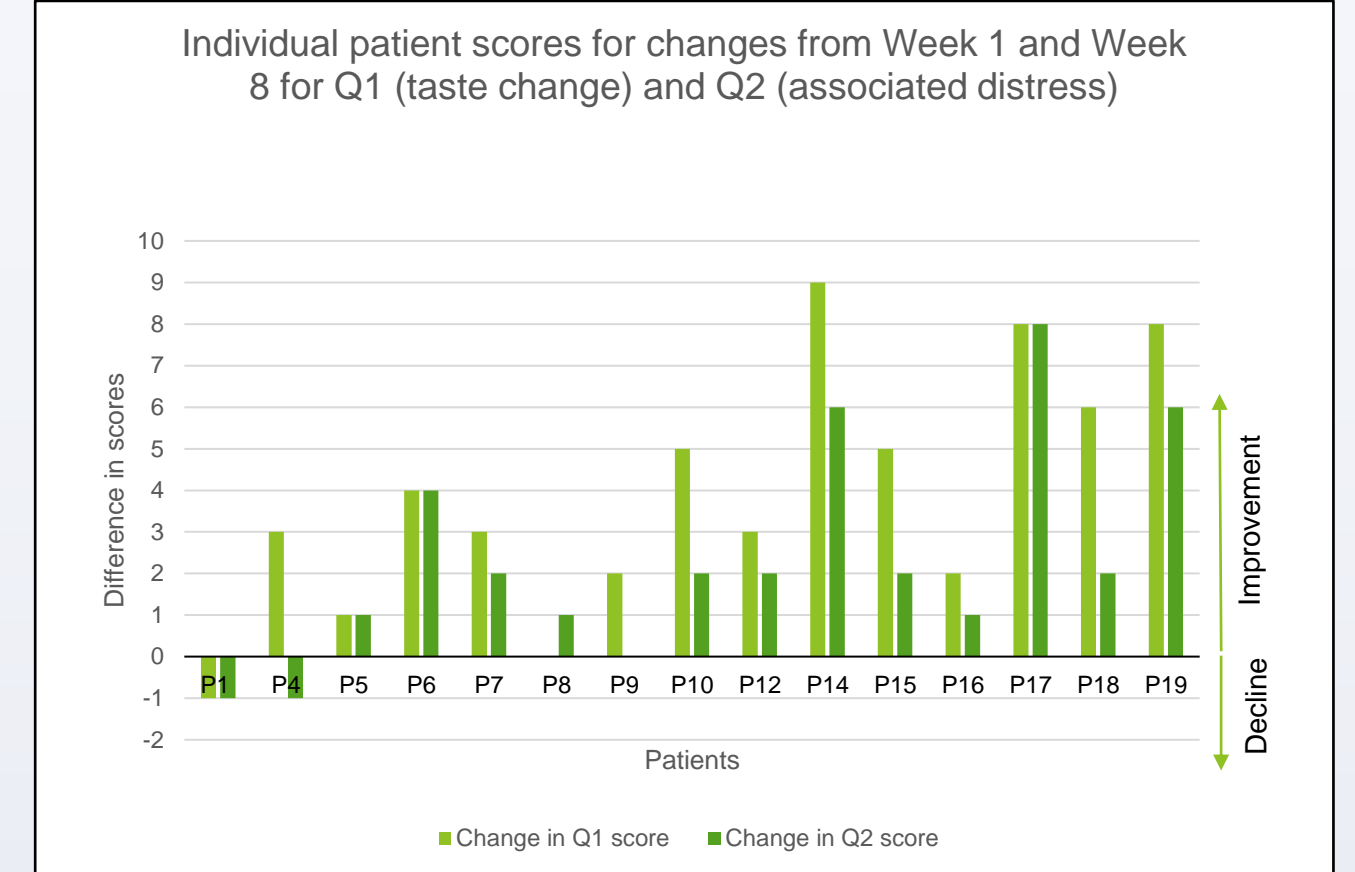


Figure 4. Survey Data

Conclusion

This study shows that an online survey delivered by email can be used for collecting taste change data post RT in HNC patients. A larger study exploring the associations between taste change, treatment, and demographic data is needed to establish if there are sub-groups of patients likely to benefit from additional support.

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References

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