Incorporation of video and/or telephone interaction is imperative to establishing a trusting therapeutic relationship between patients and healthcare providers.

Effect of communication mode on disclosure of nutrition impact symptoms during nutrition intervention delivered to people with upper gastrointestinal cancer

INTRO

- Individuals diagnosed with upper gastrointestinal (UGI) cancers (gastric, oesophageal and pancreatic) experience a myriad of nutrition impact symptoms (NIS) compromising a person’s ability to meet nutritional requirements and lead to malnutrition, reduced quality of life and poorer survival
- eHealth has been lauded as a potential strategy for improving nutrition intervention delivery via early and sustained access to dietitians to address both NIS and malnutrition
- Aim: Whether telephone or mobile app nutrition intervention delivery affects disclosure of NIS during the early, intensive nutrition intervention

METHODS

- **Design:** Three-armed randomised controlled trial
- **Participants:** Newly diagnosed (<4 weeks) UGI cancer patients planned to commence surgical and/or medical (chemotherapy and/or radiotherapy) cancer treatment
- **Setting:** Recruited from four tertiary hospitals (public and private) across southeast Melbourne, Victoria, Australia
- **Intervention:** Regular nutrition intervention for 18 weeks from a research dietitian via telephone (synchronous) or mobile application (asynchronous) using behaviour change techniques to collect reported NIS compared to usual care control group
- **Analysis:** Univariate and multiple regression analysis used to explore relationship between demographics and reporting of NIS

RESULTS

- A total of n=111 participants were recruited from April 2017 to July 2019
- Top 5 reported NIS across both groups were **weight loss** (73%), **fatigue** (72%), **anorexia** (68%), **pain** (66%) and **early satiety** (57%)

Incidence of reporting NIS:

- >1.8 times higher in the **telephone group** (n=38), compared to the **mobile app group** (n = 36).
- **Telephone group:**
  - >5 times more likely to report **fatigue** (95% CI: 1.7 to 16.6, p=0.004) and **anorexia** (95% CI: 1.8 to 15.6, p=0.003)
  - >3 times more likely to report **nausea** (95% CI 1.4 to 9.5, p=0.01)

DISCUSSION

- Telephone delivery of early and intensive nutrition care led to increased disclosure of the number and type of NIS compared to the mobile app group
- Caution should be applied when introducing virtual healthcare approaches as a standard of care
- Incorporation of video and/or telephone interaction is likely to be imperative in establishing this connection
- Human connection is fundamental in developing a trusting therapeutic patient-provider relationship
- Mobile apps may be a poor substitute for synchronous enquiry

Table 1. Difference between intervention group in likelihood of reporting individual symptoms

<table>
<thead>
<tr>
<th>Nutritional Impact Symptoms</th>
<th>Participant reporting symptom (Total n=111)</th>
<th>%</th>
<th>95% CI</th>
<th>OR</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatigue</td>
<td>53/72%</td>
<td>5.28</td>
<td>3.09</td>
<td>2.84</td>
<td>1.67</td>
</tr>
<tr>
<td>Anorexia</td>
<td>50/68%</td>
<td>5.33</td>
<td>2.96</td>
<td>2.01</td>
<td>1.79</td>
</tr>
<tr>
<td>Nausea</td>
<td>32/70%</td>
<td>3.56</td>
<td>1.77</td>
<td>2.35</td>
<td>1.35</td>
</tr>
<tr>
<td>Pain</td>
<td>49/66%</td>
<td>2.58</td>
<td>1.33</td>
<td>1.86</td>
<td>1.53</td>
</tr>
<tr>
<td>Dysphagia</td>
<td>6/15%</td>
<td>7.95</td>
<td>3.37</td>
<td>3.53</td>
<td>1.37</td>
</tr>
</tbody>
</table>

* Higher odds ratios indicate telephone group more likely to report

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