The effects of a family-centered psychosocial-based nutrition intervention in patients with advanced cancer: The PiCNIC2 pilot randomised controlled trial

Molassiotis A1, Brown T2, Cheng H1, Byrnes A2, Chan R3,4, Wyld D2,3,5, Eastgate M2,3,5, Yates P3, Marshall A5,7, Fichera R2, Isenring E8, To K1, Ko P9, Lam W10, Lam Y10, Au L11, Lo S11

1Hong Kong Polytechnic University 2Royal Brisbane and Women’s Hospital, 3Queensland University of Technology, 4Princess Alexandra Hospital, 5University of Queensland, 6Menzies Health Institute Queensland, 7Gold Coast University Hospital, 8Bond University, 9Kowloon East Cluster Hospital Authority, 10Haven of Hope Hospital, Hong Kong, 11Shatin Hospital, Hong Kong

Patients with advanced cancer often experience malnutrition which impacts on their quality of life as well as their family/carers. PiCNIC is an intervention that has been designed to manage nutrition impact symptoms, minimise weight loss and improve quality of life - through an intensive nutrition education and counselling approach in conjunction with the patient, family and caregivers.

- A multicentre RCT (Australia and Hong Kong) whereby patients with advanced cancer were randomised to either the intervention or usual care.
- The PiCNIC intervention involved 3 x intensive dietetic consults over a 6-week period.
- Usual care was with the palliative care team (Hong Kong) or review by the dietitian (Australia).
- Outcomes were measured at baseline and at 6 weeks and included a range of nutritional, psychosocial and quality of life tools.

FEASIBILITY OUTCOMES
- Recruitment rates were between 7-15%
- Consent rates were approx. 50% overall
- Trial Retention rates were higher in Australia (81-84%) vs Hong Kong (62%)
  - most likely due to flexibility of timing & location of appointments
- Only half of all participants returned the final outcome assessment forms
- Acceptability of the assessment tools was moderate-high
  - with scores rated out of 10 at 5.2-8.6 (Australia) and at 6.5-7.1 (Hong Kong)

<table>
<thead>
<tr>
<th></th>
<th>Australia</th>
<th>Hong Kong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean change in baseline scores</td>
<td>Intervention</td>
<td>Control</td>
</tr>
<tr>
<td>Eating related distress</td>
<td>-0.44</td>
<td>2.00</td>
</tr>
<tr>
<td>Eating related enjoyment</td>
<td>2.22</td>
<td>3.89</td>
</tr>
<tr>
<td>QOL – FACCT score</td>
<td>5.39</td>
<td>-6.58</td>
</tr>
</tbody>
</table>

Despite difficulties with recruitment, the intervention demonstrates good potential to have positive effects on patients’ eating-related distress and quality of life. However no impact was seen for carers.
A larger, fully-powered RCT is needed to ascertain the effectiveness of this intervention.