The Telehealth Literacy Project

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Background

• Part of Feros Care’s My Health Clinic At Home

• Aged 50+ years with at least chronic condition

• Daily vital signs readings and well-being questions sent to Telehealth Nurse (THN)

• Participants, IT support – NSW

THN and IT support team – Qld
INDIVIDUAL VIDEOCONFERENCING
Aim

- To develop, implement and evaluate the effectiveness and acceptability of a home-based videoconference group program for older people on health literacy and self-management skills and support.
Why is Health Literacy Important?

“If people cannot obtain, process and understand basic health information they will not be able to look after themselves or make good health decisions.”

Coulter BMJ 2007:335
Health Literacy and Poor Health

- ↑ chronic illness (e.g. CVD, diabetes, obesity)
- ↑ mortality (all cause)
- ↑ hospitalisation rates and use of emergency services
- ↑ medication errors
- ↓ preventive services such as screening
- ↓ self management skills
- ↓ knowledge about disease
- ↓ satisfaction with doctor-patient communication

(AHRQ Systematic reviews: DeWalt et al 2004; Berkman et al 2011)
Literacy Levels in Australia

• 60% had ‘very poor’ or ‘marginal’ health literacy
  • Australian Adult Literacy and Life Skills survey 2006
Methods

- 5-week course content informed by:
  - Participant advisory group
  - Baseline data for the Health Literacy Questionnaire (HLQ)
  - Health professional workshop
  - Literature review of self-management programs

- Mixed methods evaluation
Data

Data Sources

- Health Literacy Questionnaire (Pre and Post with a control group)
- MHCAH Client Experience Survey, Acceptability Survey
- Social Network Tool
- 16 Semi-structured interviews
- 3 focus groups
- Course journal detailing implementation

Analysis

- Quantitative - Descriptive statistics
- Qualitative data – Thematic analysis
Health Literacy Questionnaire (HLQ)

1. Feeling understood by healthcare providers
2. Having sufficient information to manage my health
3. Actively managing my health
4. Social support for health
5. Appraisal of health information
6. Ability to find good information
7. Ability to actively engage with healthcare providers
8. Navigating the healthcare system
9. Understanding health information well enough to know what to do

10. Osborne 2013 BMC Public Health
Telehealth Literacy Project

- 52 participants in 9 groups
- 44 group VC’s
- Lasting between 45 mins to 1.5 hrs
- Groups ranged between 1 – 7 participants
- Mean participants in group = 4.2
- Facilitation methods rather than didactic teaching
<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>Active self-management, Being active and Goal setting</td>
</tr>
<tr>
<td>2</td>
<td>Self-monitoring and insight, Problem solving</td>
</tr>
<tr>
<td>3</td>
<td>Communicating with health professionals</td>
</tr>
<tr>
<td>4</td>
<td>Finding, understanding and using health information Nutrition for seniors</td>
</tr>
<tr>
<td>5</td>
<td>Being medicine wise, Advance Care Planning</td>
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## Participant Demographics

<table>
<thead>
<tr>
<th>Participants</th>
<th>N/%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age</td>
<td>73</td>
</tr>
<tr>
<td>Average No. of Chronic Conditions</td>
<td>4</td>
</tr>
<tr>
<td>Females</td>
<td>54%</td>
</tr>
<tr>
<td>Lives alone</td>
<td>35%</td>
</tr>
<tr>
<td>Private health insurance</td>
<td>52%</td>
</tr>
<tr>
<td>Not completed high school</td>
<td>37%</td>
</tr>
<tr>
<td>Live in Coffs Harbour area</td>
<td>94%</td>
</tr>
<tr>
<td>Connected to high speed broadband</td>
<td>75%</td>
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Videoconferencing Facilities
Best Use of Videoconferencing

- 1 person talking at a time
- Raise your hand when you want to talk and the leader will invite you
- Remember that everyone can see and hear you
- Please turn mobile phones off
Mean Change of HLQ Scale Scores for Participant vs Control Groups

Health Literacy Scale Scores

- Health Professional Support
- Having Sufficient Information
- Actively Managing Health
- Social Support
- Appraising Health Information
- Actively Engaged
- Navigating Healthcare System
- Finding Health Information
- Understanding Health Information

- Participant
- Control
## Client Experience Survey
### THLP vs MHCAH Participants

<table>
<thead>
<tr>
<th>Statement</th>
<th>Odds Ratio</th>
<th>CI Lower</th>
<th>CI Upper</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am more confident in discussing my health with my doctor</td>
<td>2.58</td>
<td>1.10</td>
<td>6.01</td>
<td>0.02</td>
</tr>
<tr>
<td>My doctor has better information to help with the ongoing management of my health condition</td>
<td>2.34</td>
<td>1.07</td>
<td>5.15</td>
<td>0.02</td>
</tr>
</tbody>
</table>
## Acceptability for using Group VC at Home

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree or Strongly Agree % (n=48)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using videoconferencing for seniors to join groups is acceptable</td>
<td>96% (n=46)</td>
</tr>
<tr>
<td>I enjoyed meeting new people via videoconferencing</td>
<td>98% (n=47)</td>
</tr>
<tr>
<td>Being part of a group via videoconference was easy to do</td>
<td>96% (n=46)</td>
</tr>
<tr>
<td>Meeting with a group via videoconference from home is easier than attending a group in person</td>
<td>86% (n=42)</td>
</tr>
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Key Themes

- Creating New Social Connections
- Social & Emotional Support
- Shared Learning
- IT Processes
Creating Social Connections

• New Social Connections

“I thought we’d established a little community there”

• Companionship

“It’s company, even if its half a day on Tuesday”
Social Support

• Connecting with others with chronic conditions

“I think it’s done marvels for everyone who’s on it. We communicate. We all understand what we’re all going through - you know there are people out there but to actually know them can make a big difference”
Emotional Support

• Empathy & Encouragement

“How many people sit at home and are going through all these things, like we’re all going through, and they think, “No one really cares. Why should we bother?” But, now, we’re here. We all get on there and we talk, we have a joke, we giggle. It’s wonderful”
Shared Learning

• Information exchange
  • Comparison with others
  • Focusing on positive aspects of lives

“When you see people getting on with their life and coping with a chronic condition, you realise you’re not in isolation and other people are doing it as well, it reinforces what you’re doing - it’s a bit more effective than just having a chitchat in a doctor’s surgery”
Processes and Using IT

• Some audio and visual problems
• Connectivity
  NBN more consistent than 4G
• Location of device
  Headsets and lighting
• VC etiquette
  Weekly pre-meeting calls
• Developing computer and IT literacy
Limitations

- Participants self-selected into MHCAH and the THLP
- Those who may have benefited may have dropped out
- Small sample size
Summary

• Proof of concept for groups via VC. It can:
  • Improve health literacy
  • Provide social support
  • Be acceptable to older people

• Older people are open to learning new technologies

• Need for high-speed internet to support these technologies
Further Information

- www.researchgate.net/publication/268450555_Multi-site_videoconferencing_for_home-based_education_of_older_people_with_chronic_conditions_the_Telehealth_Literacy_Project/

- Thank you!