Education experiences of cardiac patients and spouses – can we add CPR training? A qualitative study.

Ms Susie Cartledge, RN, PhD Candidate
A/Prof Susan Feldman, Dr Janet Bray, Dr Dion Stub, Professor Judith Finn
Out of hospital cardiac arrest

72% → 76% → 46% witnessed → Spouse unlikely to have CPR skills → 7% discharge

Ambulance Victoria, 2017
The ILCOR EIT Task Force recommends BLS training for individuals (family or caregivers) caring for high-risk populations, based on the willingness to be trained and the fact that there is low risk of harm and high potential of benefit. 2015 ILCOR Recommendations
Qualitative perspective

**Qualitative research:** “allows researchers to explore issues from the perspectives of the individuals directly involved”  
Hansen, 2006, p1

**Phenomenology:** looking for meaning in everyday life experiences of individuals  
Berger & Luckmann, 1996

**Theory of planned behaviour:** predicts intentions to perform behaviours by examining
- Attitudes towards the behaviour
- Social pressures
- Perceived behavioural control  
Ajzen, 1991

- Understand patient education experience
- Explore intent towards CPR training
Aim & Methods

Understand:

1) The experience of patient and spousal education following an acute cardiac event and

2) Preferences, attitudes and intentions towards future CPR training

- Semi-structured interviews with **cardiac patients and their spouse**
  - First outpatient appointment
  - Purposive sampling
  - Six open ended questions
  - Transcribed verbatim
  - Thematic analysis; phenomenology & theory of planned behaviour
Results: Demographics

- n = 24, 12 patient spouse pairs
- Acute cardiac event- myocardial infarction or Takotsubo
- 9 male patients, 3 female patients
- Mean age patients = 62 years
- Age range all participants = 42 – 75 years
- Mean interview time 32 mins
Results: Experience of patient education

- Patient education experience post acute cardiac event
- Emotions: Denial, Shock, Fear
- Responsibility
- Control (In & out of)
## Results: CPR training intentions

### Theory of Planned Behaviour

<table>
<thead>
<tr>
<th>Behavioural beliefs</th>
<th>Statement</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Behavioural beliefs</strong></td>
<td></td>
<td></td>
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<tr>
<td>Attitude towards the behaviour</td>
<td>“Whoever can learn CPR the more the better”</td>
<td>Spouse 005, female, 69 years</td>
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<tr>
<td></td>
<td>“Oh yes, I think I should [learn CPR]!”</td>
<td>Spouse 010, female, 57 years</td>
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Results: CPR training preferences
Self instructional video training
Results: CPR training preferences
Conclusion

- Cardiac patients have unmet education and information needs upon discharge
- Information ↑ control and ↓ negative emotional responses associated with acute cardiac event
- Majority of cardiac patients and spouses have positive attitudes and intent towards undertaking CPR training
- Preferences are for CPR training to be included within cardiac rehabilitation
Acknowledgements

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  - Dr Dion Stub
  - Associate Professor Susan Feldman

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- Alfred Hospital

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Questions?

susie.cartledge@monash.edu

@susiecartledge

@aus_roc

www.ausroc.org.au
Limitations

- Sample subject to bias
- English speaking participants only
- One site
Cardiac rehabilitation

- Secondary prevention program
- Combination of exercise and education
- Readmission rates and mortality reduced by 30%
- Family members can also attend
- Ideal catchment and environment for training interventions
Early recognition and call for help - to prevent cardiac arrest

Early CPR - to buy time

Early Defibrillation - to restart the heart

Post resuscitation care - to restore quality of life
### Results: Sample characteristics

<table>
<thead>
<tr>
<th>Patients, n = 12</th>
<th>Spouses, n = 12</th>
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</thead>
<tbody>
<tr>
<td><strong>Mean age, years (range)</strong></td>
<td>62 (42 – 75)</td>
</tr>
<tr>
<td><strong>Male sex, n</strong></td>
<td>9</td>
</tr>
<tr>
<td><strong>Previous CPR training</strong></td>
<td>6</td>
</tr>
<tr>
<td><strong>Median hospital LOS, (IQR)</strong></td>
<td>3.8 (1)</td>
</tr>
<tr>
<td>STEMI</td>
<td>5</td>
</tr>
<tr>
<td>NSTEMI</td>
<td>5</td>
</tr>
<tr>
<td>Takotsubo cardiomyopathy</td>
<td>2</td>
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</tbody>
</table>

- Average interview time: 32 mins (range 21 – 63 mins)
- All face to face, 1 via Skype
- Range of backgrounds: Sri Lanka, Poland, Israel
Victorian CPR training survey, 2016

In households with heart disease:

- 68% Prior CPR training
- 53% Training >5 years ago
- 53% Aware of hands only CPR