Improved self management in clients enrolled in the Aboriginal Chronic Care Program (ACCP) at Budyari Community Health Centre

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• Populations at risk of vascular related morbidity and mortality due to chronic diseases benefit from intensive and simultaneous multi targeted approach to cardiovascular risk factor modification (1)

• Health Literacy - Active learning and learner participation- produce better educational outcomes (2)

• Peer led interventions – positive impacts on knowledge, confidence and attitudes (3) Peer mentoring has been acknowledged as important in improving the health of indigenous people living in the Western suburbs of Melbourne (4)

Unknown= Urban Aboriginal population using traditional based education methods that including peer education and using visual charts to interpret medical results.
The two year prospective cohort study aimed at enhancing knowledge and self-management skills for Aboriginal people living with chronic disease(s), through the use of simplified colour coded health record charts and lay lead peer health education sessions.
Methods

Two year prospective cohort study

Recruited participants-
  • Sample size = 40
  • Registered with Aboriginal Chronic Care Program
  • One or more chronic condition (diabetes, respiratory, cardiovascular, renal
  • 72.5% were Aboriginal
  • 70% female, 30% male
  • Average age 60 years (range 26 to 83yrs)
  • 52.5% had a background of hypertension
  • All clients had diabetes
  • 70% were dyslipidemic
  • 25% had Ischemic heart disease
  • 55% of enrolled clients were non-smoker
  • 7.5% already suffered an event of cerebrovascular accident (CVA)
Methods

Peer Education-

- Peer educators were people living with a chronic disease, or carers of a person with a chronic disease
- Training of trainers was done – topics diabetes, blood pressure, kidney disease and Lipids
- Education session organised to include other activities – art & craft, painting, cooking classes
- Ten education sessions facilitated by peer educators organised
  - Tharawal Medical services
  - Budyari Community centre
  - Established Aboriginal Community groups

Health Record Book- Similar concept as the ‘between the flag’ that creates a safety net.

- Provided to all participants
- Colour coded
- Completed by clinician at clinic visit
Results

Research participants – literacy level in percentage

<table>
<thead>
<tr>
<th>Grade</th>
<th>Literacy Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1-6</td>
<td>25%</td>
</tr>
<tr>
<td>Year 7</td>
<td>10%</td>
</tr>
<tr>
<td>Year 8</td>
<td>30%</td>
</tr>
<tr>
<td>Year 9</td>
<td>15%</td>
</tr>
<tr>
<td>Year 10</td>
<td>10%</td>
</tr>
<tr>
<td>College</td>
<td>5%</td>
</tr>
<tr>
<td>Uni</td>
<td>5%</td>
</tr>
</tbody>
</table>
Results Ctd

- Positive response on use of the health record book. “My kidneys are orange, how do I get them to be on the green?” Quote from two participants. One of them quit smoking as advised, and her kidney function improved.

- 22 Health record books available for review – majority had anthropometric and laboratory measures written

[Client Health Record Book.pdf]

- 50% of clients had their retina checked

- 37.5% had podiatrist review
## Results ctd

<table>
<thead>
<tr>
<th>Clinical Indicator</th>
<th>Pre Intervention</th>
<th>Post Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>HbA1c</td>
<td>8.3%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Blood pressure</td>
<td>130/80mmHg</td>
<td>129/76mmHg</td>
</tr>
<tr>
<td>Albumin creatinine ratio</td>
<td>48.mg/mmol</td>
<td>41.1mg/mmol</td>
</tr>
<tr>
<td>eGFR</td>
<td>67ml/min</td>
<td>65.2ml/min</td>
</tr>
<tr>
<td>Total Cholesterol</td>
<td>4.4</td>
<td>4.1</td>
</tr>
<tr>
<td>LDL</td>
<td>2.2</td>
<td>2.0</td>
</tr>
<tr>
<td>Trigs</td>
<td>2</td>
<td>1.9</td>
</tr>
<tr>
<td>HDL</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Weight</td>
<td>96.2kg</td>
<td>97.5kg</td>
</tr>
</tbody>
</table>
Results

Peer Education

• Two peer educators completed training of trainers education program

• Four education sessions facilitated by peer educators

• Established Aboriginal community group – full attendance and participation

• 2 out of 5 people invited to Tharawal Aboriginal Medical services attended

• Budyari Community Centre – Nil attendance

Knowledge Attitude and Practice (KAP) Survey and Patient Satisfaction Surveys analysis currently in progress
Discussion

- Peer education was well attended when attached to an existing activity.

- Peer educators facilitating a yarn on health topics helped break barriers as participants felt they were of their mob. They have a common language in the community.

- The record book was well utilised by majority of participants.

- There was improvement in glycemic control and cardiovascular risk factors – Blood pressure and Lipids, as well as Albumin creatinine ratio (UACR).
Conclusions

In an urban based Aboriginal population where chronic disease is prevalent, the provision of peer education and health record books contributes to the optimisation of health literacy and quality of life.
References

Including:

2. Chris S. Simulation in Health Professional Education. Education Theory and Practice. October 2010

Figure 1- NSW Department of Health (2005). NSW Aboriginal Chronic Conditions Area Health Service Standard Cardiovascular disease, kidney disease, diabetes, chronic obstructive pulmonary disease, asthma and cancer.
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