Are we making a difference? What impact does cultural awareness education have on student’s attitudes?

...Second results from a longitudinal study.

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Associate Professor Shannon Springer
Many Universities undertake cultural awareness education

Little evidence on impact

Some found it largely ineffective in improving doctors skills (Sears KP, 2012)

Some having reverse effect - hostility racism (McDermott D, 2012)

This longitudinal study aims to measure the impact that a comprehensive Indigenous health program has had over the first three years in a medical program
What Indigenous health do we teach at Bond?

- Year 1-3 - 9 x PBL cases
- Year 1 - Cultural immersion
- Year 5 - Remote and Indigenous clinical placements
Year 1 - ‘Building awareness’

- Three x 1 week Aboriginal or Torres Strait Islander identified cases.
- Cultural immersion**

Year 2 – ‘Respecting difference’

- Three x 1 week Aboriginal or Torres Strait Islander identified cases.

Year 3 – ‘Building resilience’

- 1 day full workshop – Racism, building resilience, social and emotional wellbeing and the role ACCHO workshop

Year 4-5 – ‘Application to clinical practice’

- Clinical and Capstone placements – AMS, ACCHOs – Apunipima, Charleville, urban areas; Port Hedland Health Campus
# Year 1 program - ‘Building awareness’

<table>
<thead>
<tr>
<th>Indigenous Cases</th>
<th>Sessions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foetal alcohol spectrum disorder S1 W6</td>
<td>1. The <strong>social determinants</strong> of Aboriginal and Torres Strait Islander health</td>
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<td></td>
<td>2. Remote transfer</td>
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<td></td>
<td>3. Health promotion in Aboriginal and Torres Strait Islander settings.</td>
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<tr>
<td>Post Myocardial Infarct S2 W5</td>
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<td></td>
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<tr>
<td>Sleep Apnoea S2 W7</td>
<td>1. <strong>What is culture</strong> – International perspectives?</td>
</tr>
<tr>
<td></td>
<td>2. Living in <strong>remote</strong> – Torres Strait Islander communities</td>
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<td></td>
<td><strong>3. CULTURAL IMMERSION</strong> – 9 x 50 min sessions**</td>
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<td></td>
<td>4. Applying the history to health status; health promotion</td>
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<td></td>
<td><strong>Assessment</strong> – develop concept map and reflection.</td>
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</tbody>
</table>
Year 1 - Cultural Immersion
Immersion - 9 sessions

1. Welcome to country
2. Culture and identity session
3. Torres Strait Islander history
4. Storytelling session
5. The history of Aboriginal Australia
6. Evening session
7. Self and community survival
8. Join the dots
9. Talking circle - evaluation
## Year 2 program - ‘Respecting Difference’

<table>
<thead>
<tr>
<th>Indigenous PBL Cases</th>
<th>Sessions</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>School learning difficulties S3 W7</td>
<td>❖ Multidisciplinary case conference ❖ Roles of extended Indigenous families ❖ Stolen Generation</td>
<td>MCQs</td>
</tr>
<tr>
<td>Valvular disease S2 W7</td>
<td>❖ Role of Aboriginal health workers; remote transfer ❖ RF and RHD - recall systems</td>
<td>MCQs + SAQ</td>
</tr>
<tr>
<td>Chronic renal failure S4, W9</td>
<td>❖ Renal disease in remote NT communities, renal dialysis</td>
<td>SAQ, MCQ</td>
</tr>
</tbody>
</table>
# Year 3 program - Building resilience

<table>
<thead>
<tr>
<th>Indigenous Cases</th>
<th>Sessions</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social and emotional wellbeing</td>
<td>1 day workshop addressing</td>
<td>MCQs, SAQ</td>
</tr>
<tr>
<td>S8 W3</td>
<td>❖ Models of health care</td>
<td></td>
</tr>
<tr>
<td></td>
<td>❖ SEW - An Aboriginal perspective</td>
<td></td>
</tr>
<tr>
<td>Racism</td>
<td>❖ Racism in health care - types of racism and institutional racism</td>
<td>MCQ, SAQ</td>
</tr>
<tr>
<td></td>
<td>❖ Power, privilege</td>
<td>Literature review</td>
</tr>
<tr>
<td></td>
<td>❖ ACCHO and their role</td>
<td></td>
</tr>
<tr>
<td>Year 4-5</td>
<td>❖ Application to practice - placements in Indigenous / other organisations - electives, selectives, GP</td>
<td>Clinical practice</td>
</tr>
</tbody>
</table>
Longitudinal study

Second results
What did we want to know?

• What impact of cultural awareness education on student’s attitudes, knowledge and behaviours?

• Is there a shift between year 1-3 as a result of the program?

• Is the impact long term?

• In what specific areas is the impact felt?
Method

• 5 yr longitudinal study

• Pre and post immersion - 1st year, year 3 and year 5

• Validated survey 21 items on 5pt Likert scale
  • adapted from 36 item Cultural Awareness Scale (Rew et al 2003) and Nurse Cultural Competence Scale (Perng and Watson 2012)

• Analysis - Principal component analysis, Mann Whitney U test.
1. Knowledge acquisition, retention and dissemination
   - E.g., I can explain the influence of culture on people’s beliefs/behaviour about health/illness

2. Perceptions of role modelling
   - E.g. The instructors at this medical school model behaviours that are sensitive to multicultural issues.

3. Institutional influences on cultural knowledge
   - E.g., Experiences at this medical school have helped me become knowledgeable about health problems associated with various cultural groups

4. Personality variables
   - E.g., I am less patient with individuals of certain cultural backgrounds

5. Internal beliefs and reflections
   - E.g., I often reflect how culture affects beliefs, attitudes and behaviours
What did we find?
Year 1 Pre- to post-immersion comparisons

Shifts showing significant differences in:

1. **Knowledge** acquisition, retention and dissemination - 3 highly significant items

2. **Institutional influences** on cultural knowledge - 2 highly significant

3. **Personality variables** - one highly significant - working with people from different cultures
Comparison between Year 1 & 3

Descriptive statistics
• Mean ratings of 20 of the 21 items all increased

Inferential statistics
• Two were highly significant
• Six were significant
• Most were in one component - Institutional Influences and role modelling by staff
## COMPARISON BETWEEN YEAR 1-3 (COHORT 2012)

### Highly significant items were:

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean Year 1 (n=187)</th>
<th>Mean Year 3 (n=132)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I often reflect on how culture affects beliefs, attitudes and behaviours</td>
<td>3.59</td>
<td>4.02</td>
<td>P=0.001**</td>
</tr>
<tr>
<td>The instructors at the medical school model behaviours that are sensitive to multicultural issues</td>
<td>3.78</td>
<td>4.11</td>
<td>P=0.001**</td>
</tr>
</tbody>
</table>

**Significance = <.01   * Significance = <.05
## Institutional influences**

<table>
<thead>
<tr>
<th>Most significant component - from year 1-3</th>
<th>Year 1 (n=187)</th>
<th>Year 3 (n=132)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiences at this medical school have helped me to become knowledgeable about health problems associated with various cultural groups</td>
<td>3.99</td>
<td>4.23</td>
<td>P&lt;0.05*</td>
</tr>
<tr>
<td>I believe <strong>classroom experiences</strong> at this medical school help students become more comfortable interacting with people from different cultures</td>
<td>3.91</td>
<td>4.13</td>
<td>P&lt;0.05*</td>
</tr>
<tr>
<td>My <strong>curriculum courses</strong> at this medical school have helped me become more comfortable interacting with people from different cultures</td>
<td>3.81</td>
<td>4.05</td>
<td>P&lt;0.05*</td>
</tr>
<tr>
<td>I feel the instructors at this medical school <strong>respect differences</strong> in individuals from diverse cultural backgrounds</td>
<td>4.16</td>
<td>4.23</td>
<td>P&lt;0.05*</td>
</tr>
</tbody>
</table>

** Significance = <.01   * Significance = <.05
### Other significant areas

<table>
<thead>
<tr>
<th>Statement</th>
<th>Year 1 (n=187)</th>
<th>Year 3 (n=132)</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>I think my beliefs and attitudes are influenced by my culture</td>
<td>4.27</td>
<td>4.43</td>
<td>P&lt;0.05</td>
</tr>
<tr>
<td>If I need more information about other peoples / patients culture, I would feel comfortable asking people I work with</td>
<td>3.93</td>
<td>4.13</td>
<td>P&lt;0.05</td>
</tr>
</tbody>
</table>

** Significance = < .01   * Significance = < .05
Conclusions

• Cultural awareness education can make a significant difference and impact on student learning their attitudes and behaviours.

• The employment of an Indigenous doctor to lead the team may be having an impact on the medical school culture and the program overall.

• Medical school can help bridge the gap.

• It is important to include significant cross cultural education, plus clinical experiences into a medical program.

• Students are initially uneasy working cross culturally but there is a shift later in their education.
What made this program a success?

- Strong leadership and support – Dean down
- Diverse cross-cultural team
- Educate all staff - this is important
- This is normal:
  - Curriculum - compulsory
  - Assessment
  - Budget

- Implementation principles
  - Do it early
  - Teach international perspectives first
  - Safe and positive small groups
  - Off site
  - Fully integrate innovative and interactive
  - Make it fun

- Student motivation has shifted 2013-18.
Limitations

• Data for year 1 and 3 were not matched limiting the strength of comparison - based on cohort stats rather than individual rankings.
• Issue now addressed.
• Therefore these are general results.
References


