Bariatric nurse certification in the USA may have intrinsic and extrinsic benefits for AUS/NZ bariatric nurses

Presented by
Narelle Story, RN, MN, CBN, PhD
Faculty of Medicine & Health

Co-Authors
Jamie J Carr, BSN, RN CBN
Trudy L Ivins, MSN, RN, CBN
Nicole Forryan, BSN, RN CBN, CBN
Abraham Apfel, BA, PhD
Jessie M Moore, APRN, MSN
William F. Gourash, CRNP, MSN, PhD
Quantifiable correlation between specialty certification and patient outcomes

  - Boltz et al (2013) ↓ pt fall rates
  - Boyle et al (2014) ↓ hospital acquired infection rates
  - Coleman et al (2009) ↑ knowledge and attitudes
  - Hickey et al (2013) ↓ odds mortality
  - Kendall-Gallagher et al (2011) ↓ mortality and failure to rescue
  - Pogorzelska et al (2012) ↓ infection rates
Bariatric nurse certification since 2007 (ASMBS)

- Program to assess professional competence of bariatric nurses
- Eligibility criteria
- On-line exam at a testing centre open twice per year
- Re-accreditation every 4 years
- Over 2000 nurses are CBNs
- International nurses are now admitted
- Approx. 5 from AUS/NZ
Research questions

— Amongst bariatric nurses, what is the perceived value of bariatric certification?

— Are there specific item differences between certified v non certified bariatric nurses?

— Does the perceived value of bariatric certification differ from the perceived of value certification in other specialties?
To examine the perception of value of bariatric nurse certification

- Perceived value of certification tool (PVCT©)
- Intrinsic (12 items) and extrinsic (6 items) values
- Web-based survey of ASMBS nurse members and non-members
- Examined certified and non-certified nurses in the bariatric speciality, and in other specialties
- ABNS (20 nurse specialties) data
- Institutional review by University of Pittsburgh
Findings

(N=462)

CBNs 62%

Non-CBNs 38%
### Certified bariatric nurses (CBNs) v non-certified bariatric nurses (Non-CBNs)

<table>
<thead>
<tr>
<th>Perceived Value</th>
<th>CBNs (n=287)</th>
<th>Non-CBNs (n=171)</th>
<th>P Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>3.45 ± 0.47</td>
<td>3.26 ± 0.53</td>
<td>***p&lt;0.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>d=.40</td>
</tr>
<tr>
<td>Intrinsic</td>
<td>3.59 ± 0.47</td>
<td>3.37 ± 0.52</td>
<td>***p&lt;0.001</td>
</tr>
<tr>
<td>Subscale</td>
<td></td>
<td></td>
<td>d=.59</td>
</tr>
<tr>
<td>Extrinsic</td>
<td>3.18 ± 0.59</td>
<td>3.03 ± 0.61</td>
<td>**p=0.009</td>
</tr>
<tr>
<td>Subscale</td>
<td></td>
<td></td>
<td>d=.35</td>
</tr>
</tbody>
</table>

(Mean ± SD; *p<.05; **p<.01; ***p<.001; Cohen’s d: smal=.2; med =.5; lge=.8)
Intrinsic values – CBN V Non-CBN

Percentage with strongest agreement

- Knowledge
- Competence
- Standards
- Credibility
- Accomplishment
- Confidence
- Satisfaction
- Challenge
- Autonomy
- Growth
- Commitment
- Accountability

CBN vs. Non-CBN
Extrinsic values - CBN v Non-CBN

Percentage with strongest agreement

- Consumer Conf.
- Marketability
- Salary
- Employer recog.
- Other
- HCP recog.
- Peer recog.
Bariatric (CBN & non-CBN) v all other specialty nurses (certified and non)

<table>
<thead>
<tr>
<th>Perceived Value</th>
<th>Bariatric nurses (n=462)</th>
<th>Other specialty nurses (n=11,185)</th>
<th>P Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>3.38 ± 0.50</td>
<td>3.35 ± 0.48</td>
<td>p=0.281</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>d=.05</td>
</tr>
<tr>
<td>Intrinsic</td>
<td>3.50 ± 0.50</td>
<td>3.49 ± 0.49</td>
<td>p=0.638</td>
</tr>
<tr>
<td>Subscale</td>
<td></td>
<td></td>
<td>d=.02</td>
</tr>
<tr>
<td>Extrinsic</td>
<td>3.10 ± 0.61</td>
<td>3.07 ± 0.61</td>
<td>p=0.068</td>
</tr>
<tr>
<td>Subscale</td>
<td></td>
<td></td>
<td>d=.09</td>
</tr>
</tbody>
</table>

(Mean ± SD; *p<.05; **p<.01; ***p<.001; Cohen’s d: sml= .2; med =.5; lge= .8)
## CBNs v certified in other specialty

<table>
<thead>
<tr>
<th>Perceived Value</th>
<th>CBNs (n=287)</th>
<th>Other certified nurses (n=8,450)</th>
<th>P Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>3.45 ± 0.47</td>
<td>3.41 ± 0.44</td>
<td>p=0.134, d=.09</td>
</tr>
<tr>
<td>Intrinsic Subscale</td>
<td>3.59 ± 0.47</td>
<td>3.56 ± 0.44</td>
<td>p=0.325, d=.06</td>
</tr>
<tr>
<td>Extrinsic Subscale</td>
<td>3.18 ± 0.59</td>
<td>3.12 ± 0.59</td>
<td>p=0.071, d=.11</td>
</tr>
</tbody>
</table>

(Mean ± SD; *p<.05; **p<.01; ***p<.001; Cohen’s d: sml=.2; med=.5; lge=.8)
Non-CBN v non-certified in other specialty

<table>
<thead>
<tr>
<th>Perceived value</th>
<th>Non-CBNs (n=171)</th>
<th>Other non certified (n=2734)</th>
<th>P Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>3.26±0.53</td>
<td>3.16±0.55</td>
<td>*p = 0.025</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>d =.18</td>
</tr>
<tr>
<td>Intrinsic</td>
<td>3.37±0.52</td>
<td>3.28±0.57</td>
<td>*p = 0.049</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>d=.16</td>
</tr>
<tr>
<td>Extrinsic</td>
<td>3.03±0.61</td>
<td>2.91±0.63</td>
<td>*p = 0.017</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>d=.19</td>
</tr>
</tbody>
</table>

(Mean ± SD; *p<.05; **p<.01; ***p<.001; Cohen’s d: sml= .2; med =.5; lge= .8)
Conclusions:

– CBNs and non-CBNs value highly bariatric nursing certification.
– The greatest & significant differences were found in the higher intrinsic values held by those certified (CBNs).
– Bariatric nurses and nurses of other specialties do not differ in their overall value of nursing certification.
– Non-CBNs value certification more highly than non-certified nurses from other specialties
Future Directions:

– Benefits in certification for AUS/NZ bariatric nurses – similar to those found here???
– ??? Barriers to certification for Aust/NZ bariatric nurses given the high value perceived by non-CBNs in the USA