Study: Attitudes towards other health care professionals

Joint RWG/EWG/CWG presentation

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Attitudes and knowledge regarding interprofessionalism among naturopathic students before and after a year of clinical internship education

Introduction, background, and Purpose
Intro

• Canadian Nursing Association (CNA) and Canadian Medical Association (CMA) have declared that ideally by 2025, a health system would be adopted that was based on integrative and interprofessional patient-centered care (CNA&CMA, 2013)

• Interprofessional care has been shown to:
  • Improve patient satisfaction
  • Strengthen quality of care
  • Increase access to available health care (Jacobson & HDR Inc., 2012).

• Attitudes held between health care practitioners have been shown to impact the ability of health care practitioners to constructively work together in collaborative practice (Hawkes, Nunney, & Lindqvist, 2013)
Current Literature about Naturopathic Medicine

• Wardle et al. 2017
  • Semi-structured interviews with 20 naturopaths in Australia discussing attitudes toward medical doctors and collaborative practice

• A number of boundaries to collaboration were identified:
  1) a lack of two-way communication between practitioners
  2) an assumed indifference and bias of MDs against the naturopathic community
  3) appropriation of naturopathic therapies by MDs without training
  4) a sense that MDs viewed naturopaths as subordinate versus being colleagues of equal standing deserving of mutual respect.
Current Literature about Naturopathic Medicine

• **Meyer 2017:**
  • Ontario-based study, looking at comparing geographic location between ND + MD offices in communities
  
  • Secondary discussion with 17 naturopathic doctors in Kitchener-Waterloo and Sudbury ON in semi-structured interview to assess views of collaboration with MDs.
  
  • Similar feelings of being dismissed by conventional practitioners
Just some of the current media attention:

**Naturopaths not 'real' doctors, despite video claims they are 'medically trained': critics**

Critics say the profession is trying to increase its legitimacy and position its services as science-based, when much of what it offers has little to no grounding in science.

**Evidence or not: alternative health makes inroads into public system**

Epidemiologist warns against legitimizing reiki, naturopathy and other treatments


**Message to naturopaths: Magic isn’t medicine**

PETER MCENIGHT  SPECIAL TO THE GLOBE AND MAIL  MAY 9, 2016

**Should naturopaths be restricted from treating children after tragic death of Alberta toddler?**

A former naturopath says she saw colleagues treat aggressive illnesses with the same 'immune boosting' herb Ezekiel was given when he was dying from meningitis.
Purpose

• Currently little is known in the literature regarding naturopathic attitudes toward other professions – never have been studied in a quantitative setting before

• The purpose of this study:
  • To investigate quantitative and qualitative attitudes of 4th year naturopathic students at the beginning and end of their final internship year using the AHPQ to determine if attitudes changed as a result of patient care experience under supervision.
Methods
Methods

• Mixed methods design (3 separate parts):
  • Attitudes to health practitioners questionnaire (AHPQ)
    • Evaluated 9 total professions including: NDs, MDs, RN/NPs, RDs, RPhs, PTs, DCs, TCMs, RMTs
  • Demographic Questionnaire
  • Qualitative Questionnaire

• Administered survey 0-1 month into internship and in 12th month of internship prior to exiting clinic
Participants

• **Inclusion Criteria (ALL criteria required for entry into the study):**
  - Naturopathic interns (self-identifying as either female, male or other) involved in patient contact and care in the Canadian College of Naturopathic Medicine with a May 2016 start date (class of 2017)
  - Willingness to consent and participate in filling out 2 questionnaires, openness to complete an additional set of written questions over the course of 10-12 months.
  - Ability to understand and answer questions in English

• **Exclusion Criteria (possessing ANY one of the following would exclude a practitioner from participation):**
  - Lacking capacity for consent and understanding of validated questionnaires and written demographic/qualitative questions.
  - Start date for clinic of later than May of 2016
Scoring the AHPQ + Questionnaires

• For the AHPQ:
  • Using a 30 cm ruler – lines were hand-measured
  • Based on calculations based on the survey’s protocol, two measures of variance or principal components were found:
    • “Caring” – characteristics including being caring, sympathetic and thoughtful
    • “Subservient” – Characteristics including being dependent or vulnerable

• Questionnaire answers were collated and underwent descriptive statistical analysis to confirm trends in information (thematic trend analysis)
The results!
Participants recruited

• 131 interns eligible based on inclusion and exclusion criteria
• Of 131 students, round 1 data collection elicited 88 possible participants
• In Round 2 data collection, these 88 were reoffered surveys, of these 77 were filled out
• In order to use the data from the AHPQ a fully completed AHPQ in both rounds of collection was required in order to complete data analysis
• In both rounds n=46 students fully completed surveys and were included in final data analysis
Participants recruited

<table>
<thead>
<tr>
<th>Distribution of self-identified gender of participants</th>
<th>Age of participants</th>
<th>Distribution in number of years of experience in any regulated health profession as self-indicated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female: 87%</td>
<td>28.8 (+/-4.4) years</td>
<td>Less than 1 year: 80%</td>
</tr>
<tr>
<td>Male: 11%</td>
<td></td>
<td>Between 1-5 years: 11%</td>
</tr>
<tr>
<td>Other: 2%</td>
<td></td>
<td>Between 5-10 years: 7%</td>
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<tr>
<td></td>
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<td>10 years or more: 2%</td>
</tr>
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</table>
Caring Scores - AHPQ

Mean Subjective Caring Values Before and After Internship

* Data Set Significant Compared to ND values on T-test (p<0.05)
(θ) Change in Score considered statistically significant on T test (p<0.05)

<table>
<thead>
<tr>
<th></th>
<th>Round 1</th>
<th>Round 2</th>
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</thead>
<tbody>
<tr>
<td>ND</td>
<td>758.7</td>
<td>743.0</td>
</tr>
<tr>
<td>MD</td>
<td>500.5</td>
<td>483.7</td>
</tr>
<tr>
<td>RN/NP</td>
<td>595.5</td>
<td>670.2</td>
</tr>
<tr>
<td>R.Ph</td>
<td>504.7</td>
<td>518.7</td>
</tr>
<tr>
<td>DC (θ)</td>
<td>631.5</td>
<td>598.4</td>
</tr>
<tr>
<td>RMT</td>
<td>712.6</td>
<td>694.7</td>
</tr>
<tr>
<td>PT (θ)</td>
<td>674.9</td>
<td>643.0</td>
</tr>
<tr>
<td>TCM</td>
<td>681.2</td>
<td>660.8</td>
</tr>
<tr>
<td>RD (θ)</td>
<td>642.8</td>
<td>591.8</td>
</tr>
</tbody>
</table>

Legend: □ Round 1  □ Round 2
Subservient Scores - AHPQ

Mean Subjective Subservient Values Before and After Internship

* Data Set Significant Compared to ND values on T-test (p<0.05)
(θ) Change in Score considered statistically significant on T-test (p<0.05)

<table>
<thead>
<tr>
<th>Category</th>
<th>Round 1</th>
<th>Round 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>ND</td>
<td>141.2</td>
<td>140.9</td>
</tr>
<tr>
<td>MD</td>
<td>96.3</td>
<td>95.7</td>
</tr>
<tr>
<td>RN/NP</td>
<td>136.3</td>
<td>137.6</td>
</tr>
<tr>
<td>R.Ph</td>
<td>114.0</td>
<td>113.7</td>
</tr>
<tr>
<td>DC</td>
<td>91.0</td>
<td>95.0</td>
</tr>
<tr>
<td>RMT</td>
<td>138.2</td>
<td>142.4</td>
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<tr>
<td>PT</td>
<td>107.1</td>
<td>118.5</td>
</tr>
<tr>
<td>TCM (θ)</td>
<td>118.9</td>
<td>131.0</td>
</tr>
<tr>
<td>RD</td>
<td>137.4</td>
<td>144.9</td>
</tr>
</tbody>
</table>
Change in attitudes

• Despite the fact that *the majority of attitudes did not reflect statistically significant change after a year in clinical internship*, 29 out of 46 (69%) interns indicated they felt their attitudes had changed over the year.

• This suggests that naturalistic changes in attitudes during a internship may warrant further exploration using different tools or design.
Collaborations with other professions

Percentage of interns indicating profession:

- MD: 85
- RN/NP: 11
- DC: 46
- RMT: 17
- RD: 7
- TCM: 13
- RPh: 9
- PT: 7
Forms of Communication used in collaboration

- EMR: 91%
- Letter: 91%
- Telephone: 33%
- Meetings: 11%
- Patient as 3rd Party: 46%
- Other: 7%
Sources of attitudes

Percentage of Students Indicating

- Class/Lectures at CCNM: 52%
- Class/Lectures before CCNM: 41%
- Supervisor Attitudes: 65%
- Past Health Experiences: 89%
- Attitudes/Experiences of Friends/Family: 52%
- Colleague Attitudes/Experiences: 46%
- Patient Attitudes/Experiences: 76%
- Other: 4%
Student satisfaction with IPE

• Interns were asked to indicate their satisfaction with the IPE they received as a part of CCNM teachings using a scale between 1 and 10 (1 being completely unsatisfied, 10 being very satisfied).

• On average, interns scored CCNM IPE satisfaction with a score of 4.2 (+/-2).
Additional comments

• “Zero experience with collaborating with other HCPs. Biased based on RSNC which may not reflect those who practice in the "real world" aka personal judgment not professional judgment” (NI #6)

• “Many CCNM instructors have negative attitudes and make negative comments (especially towards MDs) which always annoyed me and I think is inappropriate!” (NI #24)

• “Each situation is individual. I have had poor/threatening experiences with some MDs and pharmacists and positive ones also. I have had personal poor experience with chiro(practor) in past then positive over this clinical year sometimes it seems other professions are threatened by the ND profession.” (NI #14)

• “Making the most of every situation makes clinic a positive experience. Focusing on the patients and learning from them.” (NI#36)

• “There is very little interprofessional work done here, something that I feel our education would benefit from in a more structural form, minimal contact with MDs for labwork (and varied experiences depending on the student), but not much real teamwork. Outside of class there is a small set of events, but they are purely student run, nothing structural/official.” (NI #31)

• “Many of my thoughts/attitudes expressed in the survey has been based on my interest in interprofessional care and seeking knowledge that wasn't readily accessible during our training here.” (NI #42)

• “It would be beneficial to learn more about how to collaborate with other HCP outside of MDs.” (NI #7)

• “Interprofessional collab(oration) remained pretty much the same this year interestingly, I feel intraprofessional collab(oration) is lacking among the ND community as there is really no communication among practicing NDs in Toronto” (NI#22)
Themes?

• Bias amongst CCNM faculty (clinical or education streams?)
  • These things may not reflect what really happens in the “real world”

• Other professions may be afraid or uncertain of NDs

• Attitudes have to be developed on more of an individual level (than profession based)

• Interprofessional education is limited to MDs (should be considering how to communicate with other professions)

• Intraprofessional communication is also lacking
So where do we go from here?
Things we now know:

- **Students are biased**, they view themselves as more “caring” than other professions (some by a large margin), and they seem to relate the attitude of less caring to some of the more “conventional” professions (ie. Pharmacists, dieticians, doctors)

- Their attitudes are formed primarily PRIOR to entering CCNM but can also be influenced while a part of the curriculum (supervisor attitudes were seen as a large contributor, as well as patient experiences)

- Just one year of clinical education is not enough to switch these attitudes – if anything – students became increasingly biased.

- We still have students graduating who interact with NO other professionals in their 4th year and for some students, they are only interacting with medical doctors exclusively
So where do we go from here?

1. **Education?**  
   - Potentially similarity-based education may be helpful  
   - Should be started prior to internship to allow for more time for attitudes to develop

2. **Support for students in clinic in communicating with other HCPs?**  
   - NOT just MDs

3. **Enforced communication with other HCPs?**  
   - All students should be required/encouraged to be collaborative

4. **Encouraging positive attitudes toward other HCPs and team-based patient care?**  
   - Supervisor and TA attitudes conducive to integrative health care team participation
Comments, Questions & Discussion

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Thank you!