Dietetic and nutrition researchers in Canada: who are they and what are they researching?

Maureen Coopera, Maria Gaddi BSc RDa, Patti Glazer BSc RDb, Kelsey Mann MScd, Natalie D. Riediger PhDde

aUniversity of Manitoba, Faculty of Agricultural and Food Sciences, Department of Food and Human Nutritional Sciences

Background

• Research is critical to knowledge creation, including developing policy and dietary guidelines.
• Increasing concern for equity, diversity, and inclusion, particularly as it relates to knowledge creation.
• Little is known about how issues of equity and diversity may be influencing the nutrition discipline.

Purpose & Objectives

To describe and compare dietetic faculty members to non-dietetic faculty members by gender, academic rank, U15 affiliation, H-index, and research methods used.

Methods

• All information was collected from publicly available websites (Scopus and university websites)
• U15 institutions and PDEP accredited programs (n=22)
• 5 most recent publications collected and methods coded as: quantitative, qualitative, mixed-methods, or meta-analyses
• Research Ethics Board approval not required
• SPSS software (Version 25): descriptive analysis for frequencies, cross-tab with chi-square test to test significance, binary logistic regression

Results

• n=237 faculty members from n=22 institutions across Canada
• 32% (n=76) were Registered Dietitians (RDs)
• We collected 724 research publications from non-RDs and 361 from RDs (total of 1085)
• RD status was not associated with being a full professor or Emeritus (p=0.925); however, compared to men, women had less than half the odds of being a full professor or Emeritus, independent of being an RD or U15 affiliation (p=0.008)
• RDs were significantly less likely to be located at U15 institutions and had a significantly lower H-index

Table 1. Characteristics of nutrition researchers according to Dietetics registration.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>N (%)</th>
<th>RD (N=76)</th>
<th>Non-RD (N=161)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>U15 Affiliation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U15 affiliated</td>
<td>167 (70.5)</td>
<td>45 (59.2)</td>
<td>122 (75.8)</td>
<td>0.009</td>
</tr>
<tr>
<td>Not U15 affiliated</td>
<td>70 (29.5)</td>
<td>31 (40.8)</td>
<td>39 (24.22)</td>
<td></td>
</tr>
<tr>
<td>PDEP* Accreditation Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PDEP Accredited</td>
<td>219 (92.4)</td>
<td>74 (97.4)</td>
<td>145 (90.0)</td>
<td>0.048</td>
</tr>
<tr>
<td>Not PDEP Accredited</td>
<td>18 (7.59)</td>
<td>2 (2.6)</td>
<td>10 (6.0)</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>85 (35.9)</td>
<td>2 (2.6)</td>
<td>83 (51.6)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Female</td>
<td>152 (64.1)</td>
<td>78 (97.4)</td>
<td>74 (48.4)</td>
<td></td>
</tr>
<tr>
<td>Rank</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assistant</td>
<td>53 (22.4)</td>
<td>17 (22.4)</td>
<td>36 (22.6)</td>
<td>0.0</td>
</tr>
<tr>
<td>Associate</td>
<td>83 (35.0)</td>
<td>33 (43.4)</td>
<td>50 (31.05)</td>
<td></td>
</tr>
<tr>
<td>Professor</td>
<td>13 (37.1)</td>
<td>25 (34.4)</td>
<td>63 (39.13)</td>
<td></td>
</tr>
<tr>
<td>Emeritus</td>
<td>13 (5.48)</td>
<td>1 (1.3)</td>
<td>12 (7.4)</td>
<td></td>
</tr>
<tr>
<td>H-index (mean (SD))</td>
<td>22.3 (19.3)</td>
<td>12.78 (9.36)</td>
<td>26.39 (20.96)</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

*PDEP = Partnership for Dietetic Education and Practice.

Discussion

There are stages of research, takes time to become an established clinician researcher (Boyd et al., 2019).
• RDs are more likely to hold part-time contracts at universities (Whelan & Markless, 2012).
• Research requires resources and commitment (Howard et al., 2013).
• Dietetics as a profession is dominated by women, other barriers (family life, wage gap, etc) may prevent career advancement.
• Gender inequalities in academic rank exist in the nutrition discipline, which may have implications for RDs.
• The Canadian Institutes of Health Research stated that investing in healthcare providers as researchers contributes to the efficiency of the healthcare system.
• RDs engage more so in qualitative and mixed-methods research compared to non-RDs, indicating greater diversity in worldviews.

Limitations

• Discrepancies in formatting of biographies from university websites.
• Gender determined by pronouns only, may not be accurate.
• Unable to determine years since PhD or terminal degree, or time at rank to further examine inequalities in rank between RDs and non-RDs.
• Examining funding sources

Future Research

• Using recent publications to explore frequencies of topic areas being researched.
• Funding sources.
• Using models to control for other variables in assessing differences in academic rank by gender to further examine the reasons for discrepancies.
• Examining funding sources

Acknowledgements

Hannah Derksen and Fareeha Quayyum who helped with data collection and data cleaning

References


Figure 1. Proportion of Non-RD to RDs conducting research

Figure 2. H-index values for non-RDs compared to RDs