Improving Accessibility and Cultivating Interest: A Model for Encouraging Higher Education among Indigenous Populations

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Outline

Background
Barriers to Postsecondary Education
Current Recruiting Methods
Experience Careers in Health
Results
Recommendations
Background

Healthcare accessibility is a significant issue in Quebec
- In 2007, 25% of Quebec’s population were without a regular physician (Gladu F.P., 2007)
- We ranked third in terms of the number of GP per 100,000 people (Gladu F.P., 2007)
- Quebec has 16% more Family Doctors per 100,000 people than the Canadian average (Gladu F.P., 2007)

Situation of Indigenous Peoples’ health in Quebec
- Infant mortality rate of up to four times the national average (Smylie et al., 2010)
- Life expectancy of Inuit is 12 years shorter than the Canadian Average (Wilkins R et al., 2008)
- Suicide rate 10 times higher among indigenous youth, compared to the Canadian Average (Fraser S.L et al. 2015)
Background

Indigenous communities lack healthcare professionals
- Indigenous students are more likely to serve indigenous populations
- Those that train in diverse student classes are more likely to practice in diverse and underserved areas

Underrepresentation of:
- Indigenous students
- Black students
- Students from Low Income Families
Barriers to Postsecondary Education

Indigenous students face multiple disadvantages and encounter unique barriers in pursuit of postsecondary education.

Unique barriers that indigenous students face include:
Barriers to Postsecondary Education

Indigenous students face multiple disadvantages and encounter unique barriers in pursuit of postsecondary education.

Unique barriers that indigenous students face include:
- Historical Barriers
- Language and Cultural Differences
- Lack of Academic Preparedness
- Living in Rural or Remote Regions
- Financial Barriers
- First Generation Students
- Educational Aspiration and Information
Barriers to Postsecondary Education

1. Historical Barriers

- The Indian Act (1876) (Allan B, Smylie J, 2015)
  - Dispossess Indigenous peoples of land and traditions
  - Colonial authorities had the power to determine who could be an “Indian”
  - Impede transmission of identity and traditional knowledge

- Forced relocation of Inuit People (Allan B, Smylie J, 2015)

- Indian Residential schools (Allan B, Smylie J, 2015)
  - Assimilate Indigenous people into mainstream society
  - Forbidden to use their language, culture and traditional practices
  - Weakened the trust and value of schooling
Barriers to Postsecondary Education

2. Language and Cultural Differences

• Differences between the western model of teaching and traditional Indigenous learning styles (Heyhoe R et al, 2017)

• Lack of official-language proficiency

3. Lack of Academic Preparedness

• 50% of Indigenous house holds have literacy problems (Wetere, R.H., 2009)

• 50% of Indigenous people live on reserves where there are 50% more high school dropouts than off reserve (Wetere, R.H., 2009)

• Indigenous students high school dropout rate 4 times higher than national average (41% vs 10%) (Wetere, R.H., 2009)
Barriers to Postsecondary Education

4. Living in Rural or Remote Regions

• Require leaving one’s social support system, family and community
• Require leaving one’s responsibilities with their family and community
• Financial cost of to relocating (not fully funded)

5. Financial Barriers

• Socio-economic status of Indigenous population is substantially lower than that of the non-Indigenous population (in 2009, on reserve income was 57% lower than the average income of non-aboriginal people (Wetere, R.H. (2009)

• In 2006, the unemployment rate Indigenous people living in Canada was 13.2%, approximately three times the rate for non-Indigenous Canadians of 5.2%. (Stats Canada, 2006)

• 47% of Indigenous students are more likely to have dependents while they are pursuing or attending postsecondary studies compared to the 20% of non-Indigenous (Malatest, et al., 2004)
Barriers to Postsecondary Education

6. Being First Generation Students

• A large amount of Indigenous students are first generation students

• Absence of postsecondary-educated role models contributes to:
  • Low educational aspirations
  • Decreased confidence and motivation
  • Misinformation on postsecondary education

• An Indigenous student is 25% more likely to attend a postsecondary institution if they know someone who already has (AFN, 2010; Tian, J. 2011)
# Current Recruiting Methods

(Indigenous Physicians Associate of Canada et al, 2008)

<table>
<thead>
<tr>
<th></th>
<th>Scholarship &amp; Bursaries</th>
<th>Support Programs</th>
<th>Outreach Programs</th>
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</thead>
<tbody>
<tr>
<td><strong>Prairies</strong></td>
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</tbody>
</table>
| University of Alberta     | Yes                     | 1. Aboriginal Student Advisor  
2. Aboriginal Healthcare Careers Program  
3. Tutoring services                      | 1. Career Fairs  
2. Poster of Aboriginal Physician and MD students sent to high schools  
3. Summer Science Camp |
| University of Calgary     | No                      | 1. Aboriginal Program Coordinator  
2. Native Centre                      | None                                                                 |
| University of Saskatchewan| Yes                     | 1. Native Access Program to Nursing and Medicine  
2. Fall Orientation  
3. Aboriginal Speaker Series  
4. Employment opportunities    | 1. Career Fairs  
2. Mentorship Program  
3. Pre-Health Science Club  
4. Aboriginal Summer Employment Program  
5. Summer Camp |
| University of Manitoba    | Yes                     | 1. Centre for Aboriginal Health Education  
2. Tutoring services                      | 1. ACCESS Program  
2. Special Premedical Students Program |
| **British Columbia**      |                         |                                                                                  |                                                                                    |
| University of British Columbia | No                  | 1. Aboriginal Program Coordinator  
2. Retreat for Aboriginal Healthcare professionals  
3. Tutoring services                      | 1. Career Fairs  
2. Aboriginal Medicine Pre-Admission Program |
## Current Recruiting Methods

(Indigenous Physicians Associate of Canada et al, 2008)

<table>
<thead>
<tr>
<th>Region</th>
<th>Scholarship &amp; Bursaries</th>
<th>Support Programs</th>
<th>Outreach Programs</th>
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</thead>
<tbody>
<tr>
<td><strong>Maritimes</strong></td>
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<tr>
<td>Dalhousie</td>
<td>No</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Memorial</td>
<td>No</td>
<td>None</td>
<td>None</td>
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<tr>
<td><strong>Ontario</strong></td>
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<td></td>
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<tr>
<td>Northern</td>
<td>Yes</td>
<td>1. Aboriginal Affairs Unit</td>
<td>1. Career Fairs</td>
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<tr>
<td>School of Medicine</td>
<td></td>
<td></td>
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<tr>
<td>University of</td>
<td>Yes</td>
<td>1. Aboriginal Physician Mentors</td>
<td>2. Summer Science Camp</td>
</tr>
<tr>
<td>Ottawa</td>
<td></td>
<td>2. Elder on call program</td>
<td>3. Immersion in Aboriginal Communities</td>
</tr>
<tr>
<td>University of</td>
<td>Yes</td>
<td></td>
<td>1. Career Fairs</td>
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<tr>
<td>Toronto</td>
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<tr>
<td>University of</td>
<td>No</td>
<td></td>
<td>1. Summer Mentorship Program</td>
</tr>
<tr>
<td>Western Ontario</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McMaster</td>
<td>No</td>
<td>1. Indigenous Liaison Counsellor</td>
<td>1. Career Fairs</td>
</tr>
<tr>
<td>University</td>
<td></td>
<td>2. Indigenous Services</td>
<td>2. Summer Science Camp</td>
</tr>
<tr>
<td>Queen’s University</td>
<td>No</td>
<td>1. Aboriginal Students’ Health Centre Office</td>
<td>3. On Campus Sporting Events</td>
</tr>
<tr>
<td>Queen’s</td>
<td>No</td>
<td>2. Inter-Professional Day in Aboriginal Health</td>
<td></td>
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<tr>
<td>Medical Schools</td>
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<td></td>
<td></td>
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<tr>
<td>Quebec</td>
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<tr>
<td>Quebec Medical</td>
<td>No</td>
<td>1. Aboriginal student advisor</td>
<td>None</td>
</tr>
<tr>
<td>Schools</td>
<td></td>
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</tbody>
</table>
Current Recruiting Methods

Current Recruiting Methods (Indigenous Physicians Associate of Canada et al, 2008)
- Financial Support
- School Visits
- Summer Science Camps

Pitfalls to Current Recruiting Methods
- Culturally Insensitive
- Students cannot see themselves in the school/ program
- Target students too late into their education
- Lack Indigenous educators/ volunteers and input
- Focused on one program only
Current Outreach Program Examples

- Cumming School of Medicine (University of Calgary) – Half day Mini-Med Day (Henderson R, 2015)

- University of Ottawa - “Come Walk in Our Moccasins” (Mini Medical Schools, 2017)
Experience Careers in Health

Focus Groups
- Indigenous Students
- Students from Low Income Families

Findings

Unique service offered
Aspects of the Hidden Curriculum
Hands-On Event
Small Classes

Organized 2 Programs for Grade 10 and 11 Students
- One for Indigenous Students (20 participants)
- One for Students from Low Income Families (40 participants)

We identified at-risk populations by:
- Cross-referencing the list of underrepresented schools in McGill’s Faculty of Medicine with the schools in communities with a lower average median income and lower academic ranking.
### Experience Careers in Health

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
</table>
| 8:00-8:45    Medicine Presentation    | - Demystify the medicine admissions process and medical school  
- Inform students of the admissions process, financial aid and services available to help obtain a career in medicine |
| 8:45-9:30   Nursing Workshop          | - Inform students on the Nursing program  
- Hands-on activities that expose the participants to the roles of a nurse |
| 9:30-10:15  Physical Therapy (PT) Workshop | - Inform students on the PT program  
- Hands-on activities that expose the participants to the roles of a physiotherapist |
| 10:15-11:00 Occupational Therapy (OT) Workshop | - Inform students on the OT program  
- Hands-on activities that expose the participants to the roles of an occupational therapist |
| 11:00-11:45 Dentistry Workshop        | - Inform students on the Dentistry program  
- Hands-on activities that expose the participants to the roles of a dentist |
# Experience Careers in Health

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:45-12:45</td>
<td>Lunch – Buddy Program</td>
<td>Pair 3 high school students with 1 medical student, so they may ask individual questions over a provided lunch.</td>
</tr>
<tr>
<td>1:00-4:00</td>
<td>Medical Simulation Centre – Workshops</td>
<td>Hands-on workshops, teaching: Suturing, Intubation, CPR, Blood Drawing and Physical Exam techniques</td>
</tr>
<tr>
<td>4:00-4:30</td>
<td>Closing Remarks</td>
<td>Certificate Distribution and Motivational Note</td>
</tr>
</tbody>
</table>
Results

Sought feedback from:
- Participants
- High School Teachers
- Faculty of Medicine Volunteers

Our survey guiding questions were:
1. How would you rate this event (5-point Likert scale)?
2. What did you like about the program?
3. What did you dislike about the program?
4. What would you like to see improved in next year’s program?
5. Would you consider a career in health following this program?
Results

100% of High School Students were satisfied or very satisfied with the overall event.

81% of High School Students were considering a career in health, prior to this event.

100% of High School Students were considering a career in health, following this event.
## Results

<table>
<thead>
<tr>
<th>Chapters</th>
<th>Feedbacks</th>
</tr>
</thead>
</table>
| High School Students    | • Appreciated the fact that it was a student-led event  
                         • Enjoyed the buddy program during the informal lunch, to address individuals’ concerns and questions  
                         • Enjoyed hands-on workshops were the most interesting and educational  
                         • Appreciated external references and resources (e.g. books, links to university programs, age-appropriate health websites / videos…)  
                         • Make it open to Grade 9 students  
                         • Spend less time on lectures / program information  
                         • Provide more information about “everyday issues” that relate to Aboriginal youth |
| High School Teachers    | • Noticed a difference in students’ motivation level following the event  
                         • Appreciated external references and resources Would want to allow more students to attend |
| Faculty of Medicine Volunteers | • Refreshing experience for the volunteers, reminded them of why they went into a health profession  
                             • Would like more interpersonal discussion time with the students  
                             • Expressed difficulty in fully understanding the upstream barriers the students face |
Recommendations

1. **Understand the Target Population**: Different populations have different needs. Understand them before organizing a recruiting event.

2. **Interprofessional Model**: Demystifies university studies for a larger population

3. **Limited Resources**: Student-led model, with hands-on activities, provide the most engaging and interesting exposure to the field.

4. **Cultural Sensitivity**: The atmosphere of the event is critical to students’ perception of their fit in the program.

5. **One-on-One Speaking Time**: Provide the participants with the opportunity to speak to current students.

6. **Certificate of Completion**: Provide the participants with a certificate of completion following the event.
Thank you
References


References


Tian, J. (2011). Barriers to postsecondary education facing Aboriginal peoples in the North: Spotting the knowledge gaps. University of Victoria: Canada
