Influences of an interdisciplinary global health program on cultural awareness and future global health involvement: A pilot study

Jeanne Frisby-Zedan, MD
McGaw Medical Center of Northwestern University
Global Health Education Day
May 13, 2020
Influences of an interdisciplinary global health program on cultural awareness and future global health involvement: A pilot study

Jeanne Frisby-Zedan, MD, Elizabeth Groothuis, MD, Ashli Doobay-Persaud, MD
McGaw Medical Center of Northwestern University Center for Global Health, Chicago, IL

Background

- Medical students and residents have an interest in being involved in global health activities.
- Barriers to residents’ involvement in global health include lack of educational or field experience structure, lack of financial resources, and lack of time.
- Participation in college, medical school, or residency specialty-specific global health programs makes a physician more likely to be involved with global health work or work with immigrant, refugee, or underserved populations in the future.
- McGraw Medical Center of Northwestern University’s Global Health Clinical Scholars Program is a 2-year multidisciplinary program that includes:
  - Medical and Ethics Simulations
  - Lectures in a variety of topics including medicine, law, economics, sociology, environmental health, and ethics
  - Scholarly Project
  - At least 1 month of field experience. Pediatric residents can choose from established sites in Tanzania, Bolivia, Refugee Health, or an alternative well-established site.
  - Formal debriefing

Hypothesis

A multidisciplinary approach to global health education within residency training improves overall self-reported cultural awareness and is a predictor of global health involvement in future career choices.

Methods

- Self-reported questionnaire of physicians who graduated from the Ann & Robert H. Lurie Children’s Hospital of Chicago/McGaw Northwestern Pediatric Residency Program from 2013-2019
- Collected
  - Baseline Characteristics
  - Likert Scales of Agreement (scale of 10) regarding self awareness and cultural awareness within the global health sphere
  - Current involvement in global health work or work with immigrant/refugee populations
  - GHCS graduate satisfaction with the program and important lessons learned
- Analysis
  - T-test and Chi-Square Analysis as appropriate

Baseline Characteristics

- Gender
  - Male: 13.1% (n=10)
  - Female: 86.9% (n=71)
- Race
  - Black: 5.6% (n=4)
  - Asian: 12.9% (n=10)
  - White/Western European: 44.6% (36)
  - Hispanic: 16.9% (13)
  - Other: 21.3% (17)
  - Unknown: 1.9% (1)
- Family
  - None: 5.6% (n=45)
  - Family: 94.4% (n=78)
- Advanced Degree
  - Yes: 45.1% (n=37)
  - No: 54.9% (n=45)

Results

- Global Health Experience in Residency
  - Global Health Experience in Residency (0-100)
- Current or Used Involvement in Global Health Activities
  - Global Health Experience in Residency (0-100)

Conclusions

- An interdisciplinary global health program has an influence on cultural and self-awareness within the global health sphere.
  - There is a need for further institutional structure, support, and funding for global health activities and care of refugee or immigrant populations in order to increase global health involvement.
  - Future studies will expand to include graduates from other specialties at McGaw Medical Center of Northwestern University.

References

Background

- Medical students and residents have an interest in being involved in global health activities.
- Barriers to residents’ involvement in global health include lack of educational or field experience structure, lack of financial resources, and lack of time.
- Participation in college, medical school, or residency specialty-specific global health programs makes a physician more likely to be involved with global health work or work with immigrant, refugee, or underserved populations in the future.
Background

- McGaw Medical Center of Northwestern University’s Global Health Clinical Scholars Program is a 2 year multidisciplinary program that includes:
  - Medical and Ethics Simulations
  - Lectures in medicine, law, economics, sociology, environmental health, and ethics
  - Scholarly Project
  - At least 1 month of field experience. Pediatrics residents can choose from Tanzania, Bolivia, Refugee Health, or an alternative well-established site.
  - Formal debriefing
Hypothesis

- A multidisciplinary approach to global health education within residency training improves overall self-reported cultural awareness and is a predictor of global health involvement in future career choices.
Methods

• Self-reported questionnaire of physicians who graduated from the Ann & Robert H. Lurie Children’s Hospital of Chicago/McGaw Northwestern Pediatric Residency Program from 2013-2019

• Collected
  – Baseline Characteristics
  – Likert Scales of Agreement (scale of 10) regarding self awareness and cultural awareness within the global health sphere
  – Current involvement in global health work or work with immigrant/refugee populations
  – GHCS graduate satisfaction with the program and important lessons learned

• Analysis
  – T-test and Chi-Square Analysis
## Baseline Characteristics

<table>
<thead>
<tr>
<th></th>
<th>GHCS (n=8)</th>
<th>No GHCS (n=56)</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean % (n)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>32.38</td>
<td>33.15</td>
<td>29-48</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>12.5 % (1)</td>
<td>14.29% (8)</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>87.5% (7)</td>
<td>83.93% (47)</td>
<td></td>
</tr>
<tr>
<td>Other/Unknown</td>
<td>0% (0)</td>
<td>1.79% (1)</td>
<td></td>
</tr>
<tr>
<td><strong>Race/ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Hispanic White or Euro-American</td>
<td>75% (6)</td>
<td>71.43% (40)</td>
<td></td>
</tr>
<tr>
<td>Black, Afro-Carribean, or African American</td>
<td>12.5% (1)</td>
<td>3.57% (2)</td>
<td></td>
</tr>
<tr>
<td>Latino or Hispanic American</td>
<td>0% (0)</td>
<td>5.36% (3)</td>
<td></td>
</tr>
<tr>
<td>East Asian or Asian American</td>
<td>0% (0)</td>
<td>5.36% (3)</td>
<td></td>
</tr>
<tr>
<td>South Asian or Indian American</td>
<td>12.5% (1)</td>
<td>8.93% (5)</td>
<td></td>
</tr>
<tr>
<td>Middle Eastern or Arab American</td>
<td>0% (0)</td>
<td>0% (0)</td>
<td></td>
</tr>
<tr>
<td>Native American or Alaskan Native</td>
<td>0% (0)</td>
<td>0% (0)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>0% (0)</td>
<td>5.36% (3)</td>
<td></td>
</tr>
</tbody>
</table>
Results

Understanding of Impact Being a Visiting Physician in Another Country Will Have on Locals

<table>
<thead>
<tr>
<th>Likert Scale</th>
<th>GHCS</th>
<th>No GHCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>7.5</td>
<td>6.22</td>
</tr>
</tbody>
</table>

Understanding of Impact Being a Physician in Another Country on Will Have on You

<table>
<thead>
<tr>
<th>Likert Scale</th>
<th>GHCS</th>
<th>No GHCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>8.25</td>
<td>6.5</td>
</tr>
</tbody>
</table>

Preparedness for Obstacles Encountered in a Foreign Culture

<table>
<thead>
<tr>
<th>Likert Scale</th>
<th>GHCS</th>
<th>No GHCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>7</td>
<td>6.29</td>
</tr>
</tbody>
</table>
Results

**Previous Global Health Experience**

- GHCS: 87.5%
- No GHCS: 44.6%

**Global Health Experience in Residency**

- GHCS: 100%
- No GHCS: 51.8%

**Current Involvement in Global Health Activities**

- GHCS: 37.5%
- No GHCS: 21.4%

**Current vs Ideal Involvement in Global Health Activities**

- Current Involvement: GHCS 22.5%, No GHCS 7.85%
- Ideal Involvement: GHCS 33.75%, No GHCS 20%
Results

- Barriers to current global health involvement or work with refugee/immigrant populations
  - Time 46.9% (30/64)
  - Salary Support 39.1% (25/64)
  - Family 25% (16/64)
  - Concerns About Safety 10.9% (7/64)
  - Other 18.8% (12/64)
Lessons Learned from GHCS Graduates

• “It has made me more understanding of various approaches to medicine and more appreciative of the surplus we have in the US. It has also factored significantly into my research and career plans for medical education.”

• “The experience was filled with countless moments and lessons that impacted me and shape the way I practice medicine today...mostly improving my competence to accept cultural differences, practices, and world views.”

Photo courtesy of Katie Pavia, MD
Conclusions

• An interdisciplinary global health program has an influence on cultural and self-awareness within the global health sphere.
• There is a need for further institutional structure, support, and funding for global health activities and care of refugee/immigrant populations in order to increase global health involvement.
• Future studies will expand to include graduates from other specialties at McGaw.
Acknowledgements

• Thank you to Elizabeth Groothuis and Ashti Doobay-Persaud for their support in creating and implementing this study.
• Thank you to Sharon Unti for support of this study within the residency program.
• Thank you to Brad Lynk for help with connecting with Lurie Children’s Pediatric Residency alumni.
References


