A Qualitative Study Describing the Perceptions of Healthcare Providers in Rural Under-served Nicaragua
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Introduction
Nicaragua is a Central American country with an estimated population of 5,691,199. Nicaragua is the poorest country in Central America, with unequal wealth distribution. Sixty percent of the nation’s wealth is owned by twenty percent of the population, while another thirty percent of the population owns only three percent of the nation's wealth. A total of forty-eight percent of the population is living below the poverty line (United Nations World Food Program). This extreme poverty affects much of the population’s access to healthcare. Among the wealthiest quintile of the population, 52.5% of people visit the doctor when they are ill. However, only 32.1% of individuals from the poorest quintile will see a physician. (World Bank)

A team of healthcare workers traveled to rural Nicaragua in April of 2010 to provide needed medical treatment. The purpose of this study was to understand and explore perceptions of these providers related to cultural understanding, working with the medically underserved, and reducing health disparities abroad.

Methods
The sample was comprised of 16 healthcare providers, including five medical students, two residents, four physicians, and five healthcare support personnel. The age range of the participants was 24 to 71 years. Males (41%) and females (59%) participated. All subjects participated in mobile health care clinics in the rural community of Chacraseca, Nicaragua for four days.

At the conclusion of their clinical experience, each subject was given an open-ended survey to which they provided their own responses, and a survey in which they ranked their level of agreement or disagreement with provided statements about their experience on a scale of one to five. Responses to the open-ended questions were used to qualitatively measure the subjects’ perception of their experience. Responses to the survey in which participants ranked agreement or disagreement were summarized and used for descriptive statistical analysis.

Research Questions
1. What are the experiences of US healthcare providers during a short-term international healthcare experience?
2. How did this experience affect their cultural understanding?
3. How did the experience affect their perceptions of working with medically underserved populations?
4. How did the experience affect their attitudes toward reducing international health disparities?

Conclusion
In conclusion, the results of this study indicate that clinical experience in rural under-served Nicaragua increased healthcare providers’ interest in the international component of their careers. Further research is needed to determine whether the reported increase in cultural understanding influenced the increased interest in international medical work, and whether that increased interest correlates with increased future participation in international medical work.

Results
Results indicated that this clinical experience increased willingness to participate in international medical work, with 87.5% of participants reporting a moderately to highly increased interest in the international component of their career. One-hundred percent of the participants felt that this experience was very or extremely influential in increasing their cultural understanding. Over 87% reported increase in awareness of the need to understand cultural differences existing between healthcare provider and patient.

Quotations from Participants
- “I think I could examine a patient anywhere after my experience in Nicaragua.”
- “Style of medicine they practice is very different from ours.”
- “Most rewarding experience [was the] opportunity to experience another culture…”
- “[Most rewarding experience was] Working as a team together to serve the needs of the people…”
- “It was satisfying to know that we were helping people that otherwise may not have received care.”
- “Helping folks who would not have had the financial opportunity to have glasses.”
- “Great medical and cultural experience.”

Table 1. Quantitative data from survey filled out by the healthcare workers

<table>
<thead>
<tr>
<th>This clinical experience...</th>
<th>Strongly Agree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased my interest in the international component of my career</td>
<td>6.25%</td>
<td>0%</td>
<td>6.25%</td>
<td>37.5%</td>
<td>50%</td>
</tr>
<tr>
<td>Influenced my cultural understanding</td>
<td></td>
<td></td>
<td></td>
<td>56.25%</td>
<td>43.75%</td>
</tr>
<tr>
<td>Increased my need to understand cultural differences</td>
<td>12.5%</td>
<td>56.25%</td>
<td>31.25%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

References
United Nations World Food Programme; Country Programme- Nicaragua (2008-2012)