PROVIDING FUTURE NURSES WITH EXPERIENTIAL LEARNING OPPORTUNITIES IN GLOBAL NURSING: THE BELIZE EXPERIENCE

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Course development and implementation

• Health disparity has a significant impact on health outcomes.
• “Building Competence for community engagement across populations” course is a service-learning trip developed as an interactive course that prepares students to care for the global population
• Trip has occurred for the past 4 years (January 2014 – present)
• 2016 – began an interdisciplinary collaboration with School of Pharmacy and School of Nursing
International Service Learning

- ISL began in 1994
- Offers various medical (nursing, dental, medicine, physical therapy, veterinary, optometry) and enrichment (ecology, education, photojournalism) programs all year long
- ISL coordinates trips to 13 different countries
- Develop itinerary to meet our needs and course objectives along with the needs of the different villages in Belize
- ISL provides in-country leaders and driver who are with us for duration of trip
  - Country leaders work closely with the community health workers in each village and have a relationship with the community health worker and villages, making entrance to the villages by our ISL group much easier
<table>
<thead>
<tr>
<th>Day:</th>
<th>Activity:</th>
</tr>
</thead>
</table>
| Saturday – Day 1 | Arrive to Phillip Goldson airport, lunch on way to destination  
|                | Arrive to Camp/hotel, dinner on-site                                                               |
| Sunday – Day 2  | Orientation classes (Orientation to Belize, medical orientation, Spanish orientation)  
|                | Sorting of donations                                                                                 |
| Monday – Day 3 | Home visits in village  
|                | Preparation for tropical disease presentation  
|                | Preparation for health teaching in school                                                           |
| Tuesday – Day 4 | Medical clinic in village  
|                | Tropical disease presentation  
|                | Health teaching to school students                                                                 |
| Wednesday – Day 5 | Home visits in a second village  
|                 | Cave tubing and zip-lining in the afternoon/evening                                                 |
| Thursday – Day 6 | Medical clinical in second village                                                                 |
| Friday – Day 7 | Visit local farmers market in capital city  
|                | Visit the University of Belize, School of Nursing; meet with director  
|                | Visit archeological site – Xunantunich                                                            |
| Saturday – Day 8 | Depart hotel and travel to Belize City  
|                | Water taxi ride to Caye Caulker – rest and relaxation on island                                    |
| Sunday – Day 9 | Depart Caye Caulker; arrive at airport to trip back home                                            |
Student Recruitment

- Informational sessions provided to junior and senior nursing classes
- Information posted on website
- Previous student participants invited to speak to classmates
- “Lunch and Learn” seminars
- YouTube video recap of trip as part of student assignment
Student experience

YouTube video assignments:

UB Study Abroad – Belize 2016

https://www.youtube.com/watch?v=2L7gf33BIpg

UB School of Nursing Belize Trip

https://www.youtube.com/watch?v=hZVVscvE-oo

Belize Movie

https://docs.google.com/file/d/0B8UrYeA4-te8UGQ2NlI0bHNUa2M/edit
Student assignments

- KWLA+R
- Daily journals
- Patient logs
- Daily debriefing in country
- Press release
- Video project
Education In Belize

- Spanish classes for community and clinic visits
- Practical and medical orientation
- Suturing class
- Tropical disease presentations
- Discussion Nursing and Pharmacy in Belize
- Local hospital tour
- Belizean dance class (Pharmacy versus Nursing!!)
Downtime in Belize

- Cultural meals for breakfast, lunch and dinner
- Visits to the Mayan Ruins
- Zip lining and tubing
- Caye Caulker
Students perceived benefits, strengths, weaknesses, skills

- Learned assessment without high technology
- Developed a respect for nontraditional medicine
- Practiced and lived outside the US culture in the remote villages of Belize.
- Access to health care remains problematic even though the healthcare system is free to all Belizeans.
Collaboration with School of Pharmacy

• Students, grouped in interdisciplinary pairs, interviewed and assessed their patients then presented their differential diagnosis the local ISL physicians.
• Students provided care to 143 Belizean patients of all ages and ethnic backgrounds.
• Age ranged from 1 month old to 95 years old.
• Treatments, medications and education were provided by a combined Nursing and Pharmacy team.
• Respect and collegiality that developed among the team members was threaded throughout each students’ journals and nightly debriefing.
• Working together they provided holistic well-rounded care that took into account the Belizean culture and medical practices.
• Each discipline came away with a better understanding and respect for each other and non-US medical practices.
Student Quotes

- “I learned that you can never judge anyone based on their culture or where they come from. In addition, each patient is unique in his or her own way and you need to respect each patient equally. I also learned that cultures may be different all around the world but people are still people and need to be treated as such.”

- “I liked that we were flooded with culture. I didn’t need to be eased into it and appreciate that we didn’t waste time doing so. I was so happy that we were served cultural food. I wanted to get the most out of this experience and food plays a large role in culture.”

- “I learned that a person can be happy with almost no material possessions. I learned that when you come from an area of violence and extreme poverty, even the slightest improvements in lifestyle can bring great joy.”

- “Being able to study abroad in Belize was a life-changing experience that I am grateful to the UB SON for providing…..the trip to Belize has had lots of firsts for me and I am still in shock that I was able to go and do all that we did. I found my last day tearing up, but I wasn’t sad. I told my grandma that this happened when I got home and she said it was because they took a piece of my heart, and I completely agree.”
# Statistics of trip

**Patient data from two clinics (2015)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of patients seen:</td>
<td>88</td>
</tr>
<tr>
<td><strong>Total males:</strong></td>
<td>28 (31.8%)</td>
</tr>
<tr>
<td><strong>Total females:</strong></td>
<td>60 (68.2%)</td>
</tr>
<tr>
<td><strong>Average total age:</strong></td>
<td>16.0 years</td>
</tr>
<tr>
<td><strong>Average male age:</strong></td>
<td>7.5 years (Range: 3 months-46)</td>
</tr>
<tr>
<td><strong>Average female age:</strong></td>
<td>19.9 years (Range: 6 months-57)</td>
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</tbody>
</table>
## Top 5 Symptoms/Diagnoses

### Frank’s Eddy Village

<table>
<thead>
<tr>
<th>Symptoms/Diagnosis</th>
<th>Total # Seen</th>
<th>% of all patients seen</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Common cold/upper respiratory infection</td>
<td>21</td>
<td>39.6%</td>
</tr>
<tr>
<td>2 Parasite Infection</td>
<td>5</td>
<td>9.4%</td>
</tr>
<tr>
<td>3 Dermatitis</td>
<td>4</td>
<td>7.5%</td>
</tr>
<tr>
<td>4 Gastritis</td>
<td>4</td>
<td>7.5%</td>
</tr>
<tr>
<td>5 Dehydration</td>
<td>4</td>
<td>7.5%</td>
</tr>
</tbody>
</table>

### More Tomorrow Village

<table>
<thead>
<tr>
<th>Symptoms/Diagnosis</th>
<th>Total # Seen</th>
<th>% of all patients seen</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Common cold/upper respiratory infection</td>
<td>10</td>
<td>28.6%</td>
</tr>
<tr>
<td>2 Fungal infections</td>
<td>8</td>
<td>22.9%</td>
</tr>
<tr>
<td>3 Dermatitis</td>
<td>6</td>
<td>17.1%</td>
</tr>
<tr>
<td>4 Gastritis</td>
<td>5</td>
<td>14.3%</td>
</tr>
<tr>
<td>5 Asthma</td>
<td>4</td>
<td>11.4%</td>
</tr>
</tbody>
</table>
Future Recommendations

- Have students meet to plan for needed donations, sorting of donations and transport to Belize. Expired medications or medical equipment that does not work are not dispensed. Close attention to this is important on donation collection.
- Incorporate more Spanish for the healthcare professional prior to going to Belize.
- Provide medical care to the fishing village on Caye Caulker (discussed with ISL while in country).
- Continue to incorporate interdisciplinary trips. ISL can accommodate multiple professions. A physical therapy team had come the week prior to our arrival!
- Easily transportable toys were a huge success with the children!
- Fundraising, possibly in conjunction with Nursing Student Associations, would be a plus. Students do find it challenging to find the time to fund raise during the school year.
- Clinical time while in Belize will now account for course time for UB Nursing students (public health service hours)
- Continue to invite nursing students from other schools who are interested in attending