OPPORTUNITIES AND BARRIERS FOR AN INTERNATIONAL ELECTIVE DURING ORTHOPAEDIC RESIDENCY

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Introduction - The Need for Orthopaedic Surgeons Worldwide

- Increase in traffic injuries/trauma
- Increase in musculoskeletal disorders

Introduction

- Residents are interested in international medical missions
- Benefits: Cultural awareness, professionalism, resourcefulness, variety of pathology, physical exam
- Little is known about how to set up an international elective

Jense RJ, University of Washington orthopedic resident experience and interest in developing an international humanitarian rotation. Am J Orthop Jan 2009
Goals

- North American Orthopaedic Residency Programs
  - What opportunities for International Electives?
  - What are the perceived barriers?
Methods

- Web-based Survey

  - 179 North American Orthopaedic Programs
    - offer an international elective
    - training year offered
    - purpose
    - financial assistance
    - location
    - coverage during the elective
    - Length
  
  - 31 orthopaedic residents at one institution
    - resident demographics
    - Interest
    - perceptions about international electives.
Methods

- **Statistical Analysis**
  - Frequency and descriptive statistics
  - Chi-square or Fisher’s exact test for categorical variables
  - Unpaired t test for continuous variables for two independent groups
  - \( p \leq 0.05 \).
179 Orthopaedic Residency Programs Surveyed

- 56 (31%) Programs Responded
- Program Size varied from 2-12 residents / yr
- 18/56 (32%) offer an international elective
  - 14/18 (78%) partnered with an overseas academic institution or NGO
  - 12/18 (67%) offer financial assistance to residents

Program size and location did not correlate with offering overseas electives
Distribution of Orthopedic Residencies Offering International Electives in North America Among Survey Respondents
Perceived Barriers of programs offering international electives vs. programs not offering international electives

* * P ≤ 0.05
Resident Responses

- 31 New Jersey Medical School Ortho Residents Surveyed
  - 29 (94%) Residents Responded
  - 51% married or in committed relationship
  - 13% have children
  - 62% Education Debt > $150,000.00
  - 38% ≥1 overseas medical experience

- None of these demographics affected resident interest in overseas electives
Resident Interest and commitment to International Elective Training (N=29)

- Interested In Elective: Yes - 25, No - 0, Maybe - 4
- Would You Use Vacation Time?: Yes - 24, No - 5, Maybe - 0
- Would You Finance Elective?: Yes - 23, No - 6, Maybe - 0
- More Willing if Faculty Present: Yes - 25, No - 4, Maybe - 0
- Rank Program with Intl Elective Higher on NRMP: Yes - 24, No - 5, Maybe - 0
- Will Do Intl Elective with No Credit for Board Cert: Yes - 25, No - 4, Maybe - 0
## Programs vs. Residents

### Most Common Answers to Survey by Programs that have an international elective and our Residents

<table>
<thead>
<tr>
<th>Question</th>
<th><strong>Existing Program</strong> (N=18)</th>
<th><strong>Resident Opinion</strong> (N=29)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose</td>
<td>Increase Cultural Awareness</td>
<td>Improve Technical Skills</td>
</tr>
<tr>
<td>Training-Yr Offered</td>
<td>PGY-4</td>
<td>PGY-4</td>
</tr>
<tr>
<td>Length (Opinion)</td>
<td>2 or 4 weeks</td>
<td>4 weeks</td>
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</table>
Existing International Electives vs. Resident Preference of Location

*Australia/New Zealand was submitted as a free response and not included in multiple choice answer*
Limitations

- 31% response rate from North American Orthopaedic Programs
- Resident Survey sent to only one institution
- No case logs from international elective
- Did not assess impact of resident elective to host country
Conclusion

- International Electives exist in at least 10% of North American orthopaedic residency programs
- Our residents attitudes shared by program directors across North America
- Our residents are very interested
  - Financial concerns
  - Benefit to residents is anecdotal
Thank You