Global Health Imaging and International Radiology: a National Survey among Canadian Radiology Residents

Rebecca Zener*, Ian Ross
Western University, London, Canada

CAR Annual Meeting – May 2015, Montreal, Canada
Disclosures

• R. Zener: No financial, commercial, or personal disclosures.

• I. Ross: No financial, commercial, or personal disclosures.
Background

• Global Health
  – Interest has steadily increased among North American medical trainees

  – U.S. radiology residents are motivated to gain global health experience\(^1\)

  – Discrepancy between U.S. radiology resident interest and opportunity availability\(^1\)
Background

• However, no similar studies have been performed in Canada
Purpose

• What is the **level of interest** of Canadian radiology residents in global health imaging (GHI)?

• What **global health imaging opportunities** are available to residents at Canadian training programs?
Method

- Study population
  - Radiology residents at Canadian training programs

- Methodology
  - Survey
    - Multiple choice questions
    - On www.surveymonkey.com
  - Invitation to participate emailed to program coordinators
Survey

• Resident demographics
  – Prior experience working in the developing world

• Radiology resident:
  – Interest in global health imaging
  – Perception of global health imaging
  – Perception of the role of Canadian radiologists in global health imaging

• Current opportunities for Canadian residents to participate in global health imaging
Results

- Respondents:
  - 50 residents (10 programs)
  - Birth Country
    - 79% Canadian/American
    - 21% were born abroad
  - 49% had close family outside of North America
  - 28% (n = 14) had previously done work/volunteering in the developing world
    - All prior to residency
    - Only 1 in radiology
Canadian resident perception

- 72% believed there is an unmet need of medical imaging services in the developing world

- 79% believed there is an increasing need for medical imaging services
Clinical entities with important imaging applications requiring attention in developing countries
Relative perception of imaging modality importance

8 is the highest score

- Radiography: 8
- Ultrasound: 7
- CT: 6
- Fluoroscopy: 5
- IR: 4
- Mammography: 3
- MRI: 2
- Nuclear medicine: 1
Plans for future pursuit of international medical imaging work

- Yes: 65%
- No: 35%
Type of future medical imaging work

- On-site collaboration in educating and training of local staff: 81%
- On-site collaboration in educating and training local residents: 69%
- Teleradiology: 65%
- Technical planning: 42%
Canadian radiology resident interest in participating in GHI

- Likely: 60%
- Uncertain: 21%
- Unlikely: 19%
My program offers...

- Diagnostic radiology rotations in a developing country: 12.5%
- Interventional radiology rotations in a developing country: 2.5%
- GHI research in a developing country: 5.0%
- GHI seminars: 7.5%
- No GHI opportunities: 60.0%
Resident preparedness for improving access and availability of medical imaging in developing countries

- Prepared: 18.00%
- Not prepared: 28.00%
- Uncertain: 54.00%
Discussion

• Our findings are congruent with the previous study of American radiology residents by Lungren et al. (2011)\(^1\):
  – 61% planned to pursue future international medical imaging work
  – 59% believed they would not be prepared
  – 62% would participate in a GHI curriculum if available
  – 91% of respondents stated their programs had no GHI curriculum
Conclusion

• Many Canadian radiology residents are interested in participating in GHI
• However, their preparation to do so may be inadequate with the current training model
• Likely an imbalance between radiology resident interest in GHI and opportunity availability
References