Building Clinical Research Capacity in Developing Countries: A Research Symposium for Orthopaedic Surgeons

Iain Elliott (MSIV)
Morgan and Madison McClellan Research Fellow

Jesse Slade Shantz MD, David Shearer MD, Amber Caldwell, Richard Coughlin MD, Saam Morshed MD

Outline

• Background
  – Global orthopaedics and research
• Research symposium format
• Survey of symposium participants
• Future work

Global Burden of Disease Study 2010

I have nothing to disclose
Global Burden of Disease Study 2010

Injury
- 11.2% of all Disability Adjusted Life Years (DALYs)
- Road traffic crashes (RTCs) are #1 killer in 15-29 year olds

Non-Traumatic MSK Disorders
- 6.8% of all DALYs
- Low back pain is single biggest cause of Years Lived with Disability (YLDs)

IGOT Research Symposium - History

- Research Symposium 2011 –
  - Flap Course 2010 – Expressed interest in research
  - Femur fracture protocol written
    - Funded by OREF and OTA

Why Research?

- The 10/90 Gap:
  - 10% of spending on health research for 90% of the world population
- Questions are different:
  - Their problems are different

IGOT Research Symposium - Format

- Lectures:
  - Framing a research question
  - Designing a study
  - Writing a protocol
- Small group breakout sessions
Survey Design

- Pre-course assessment:
  - Background of participants
  - Self-assessment – likert items
  - Barriers and drivers
- Post-course assessment
  - Self-assessment questions repeated
  - Feedback

Representation

N=31

Have you had formal training in research methodology?

Does your home institution have a research requirement?

Are you currently performing research?

Have you had formal training in research methodology?

Background in Research

Current Research

Prospective Cohort Studies

Retrospective Case Series

Randomized Controlled Trials
Self-Assessment Likert Items:

Please rate your ability to:

- Formulate a hypothesis?
- Design a clinical study?
- Conduct a clinical study?
- Publish your work?

Future Work - Assessment

- Assessment of impact:
  - Quality of ongoing studies
  - Number of publications

Future Work – Research Accelerator

- Online Resources:
  - Webinars
  - Tools
- Mentoring

Why Does This Matter?

Surgeons have questions that need answering
Thank you

Jesse Slade Shantz MD
Saam Morshed MD
David Shearer MD
Richard Coughlin MD
Amber Caldwell

References

- Mavroudis CD, Mavroudis C, Jacobs JP, Siegel A. The role of research for sustainable paediatric cardiac programmes in developing countries. Cardiol Young. 2012 Dec;22(6):787–95.