Global Surgical Volunteerism: Thoracic in the South Pacific

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Early Riser Session
STS, Orlando
January 28, 2014
Objectives

• Surgical Care in the Solomon Islands, the South Pacific experience

• Practical, hands-on thoracic surgery training in a resource poor hospital: empower the locals

• The global impact of surgical volunteerism
Solomon Islands

Population 600,000
Surgical Care in the Solomon Islands, the South Pacific experience

• Pacific Region:

• Highest incidence of **gastric**, liver and **lung** cancer in the world.
• *H. pylori* prevalent in 50% of the population
• 80% of the gastric cancers caused by untreated *H. pylori*
H. pylori and gastric cancer
MDR Tb
National Referral Hospital

- Tertiary care
- Last endoscopy 2007, when Fiberscope System broke down
- SI Endoscopy Training Program led by SI Living Memorial Project
- 5-day courses
- Audience MDs, nurses, students
Course design

• Didactics in the morning
  – Equipment
  – Technique
  – Updates on the Diseases

• Faculty:
  – Clinicians: visiting and local
  – Biomedical engineer
  – Surgical tech
  – Endoscopy nurse
Medication Administration

Level of Sedation

- S = Sleep
- 1 = Awake and alert
- 2 = Slightly drowsy, easily aroused
- 3 = Frequently drowsy, arousable, drifts to sleep
- 4 = Somnolent, minimal or no response
High Level Disinfection
Recovery of Patient

- Monitor and document
- Maintain IV access post sedation
- Symptoms to report to physician
  - severe abdominal cramping
  - firm distended abdomen
  - vomiting
  - fever
  - difficulty swallowing/severe sore throat
Course design

• Pre- and Post-course tests

• Educational materials:
  – DVDs, textbooks, literature references

• Between patients watch videos, teach, round
Course design

- Hands-on:
  - See one
  - Do one

- Endoscopy
- Bronchoscopy
- VATS
Needs

• Donation of equipment

• Financial support for travel and accommodations:
  – Foundation (SILMP)
  – American Society for GI Endoscopy Ambassador Program
  – Industry: Olympus, Cook, MediCapture, Scanlan
Results (1)

- 20 local physicians and nurses attended
- Patients identified and cases discussed pre-procedure
- Findings: advanced cancers in many
Results (2)

• Pre-test 14 questions
• Post-test 16 questions

• Pre and post test scores:
  • Physicians: 57% → 82%
  • Nurses: 41% → 54%
Concerns: Safety

• Civil wars

• Health
  – Malaria
  – HIV
  – Tb
Goal

• Empower the local surgeons and clinicians

• Take them through cases

• Set it up so they can do the procedures when you leave
Conclusions (1)

• Delineate what short-term surgical volunteer opportunities exist for cardiothoracic surgeons

• Understand the global need for cardiothoracic surgeons in developing countries
Conclusions (2)

• Identify how to select a volunteer opportunity
  – Operation Giving Back
    (www.operationgivingback.facs.org/)
  – Scanlan Life Programs
    (www.scanlaninternational.com/scanlanlifeprograms/)
  – #globalsurgery

• Identify the optimal time in one’s career for surgical volunteering

• Delineate the benchmarks of a rewarding volunteer experience
Volunteer Work