GLOBAL ULTRASOUND EDUCATION

DISCLOSURES

- None

OBJECTIVES

- Global Ultrasound Education
  - Strategies for success in the low resource environment
    - What Works
    - What Doesn't
EQUIPMENT IS NOT THE PROBLEM
  ▶ Don’t just donate

DON’T JUST SHOW UP
  ▶ Approach it like any other rigorous educational program
    ▶ Goals
    ▶ Objectives
    ▶ Local expectations

CURRICULUM PLAN
  ▶ Is your trip part of a larger effort?
    ▶ Can it be?
  ▶ Think big and think long term
  ▶ Select the core material
  ▶ Select the expanded material
  ▶ Knowledge, skills, behavior.
THE CHALLENGE OF THE NEEDS ASSESSMENT

- Equipment
- Needs of learners
- Needs of health system
- WiFi
- English mastery

GREETINGS, I AM DR. SCHICK.

Greetings, Thank you.
I have questions: 1-10.
Yes, that sounds wonderful.
I have questions: 1-2.
Here are part of the answers you seek.
Let me try to ask different questions 3-4.
I am a bit tired of answering your many questions.

DON’T BE ON YOUR SCHEDULE

Do plan for things to take extra time

MAKE YOUR MATERIALS - DON’T MAKE ASSUMPTIONS

- Analogies and examples
- Medical knowledge
- Experience with ultrasound
- Emphasize how to generate and optimize images
DON’T WASTE TIME

- Be prepared
- Don’t teach things that they don’t need
  - Aorta
  - DVT
  - Pelvic
  - Procedures
- Understand the scope of teaching and resources available

FLIPPING THE CLASSROOM

SHORT AND SWEET
SMALL WORDS
NO MEDICAL JARGON
CASE BASED - WITH LOCAL FLARE

DON’T APPROACH LECTURES THE SAME WAY
Case 1

- 23 year old female presents with progressive right upper quadrant pain for 3 weeks.

Next Steps

- What other information do you want?
- What is the differential diagnosis?
- What tests will you do?
ACTIVE ASSESSMENT

- Knowledge level
- Learner needs
- Breaks the shell

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ACTIVE LEARNING

- Team based learning
- Problem based learning
- Gamification
- White boards
- Laser pointers
- Competition

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MAKE IT HANDS ON

- In your department
- Hit the wards
- Standardized patients
- Simulation

DELEGATING RESPONSIBILITY

- Teaching is a great way to learn
- We all have to teach
- We should all be working to put ourselves out of a job
Ultrasound Education and Its Implications for Global Healthcare Delivery

MAKE IT LOCALLY FOCUSED

- Infectious Disease
- SHoC: Sonography for Hypotension and Cardiac Arrest
- FASH: Focused Assessment of Sonography for HIV and extra-pulmonary tuberculosis
- ABUE: Abdominal Assessment for Undifferentiated distention or pain
- SOTL: Sonography of Thorax and Lung

MAKE IT LEARNER FOCUSED

Getting my "hands-on experience" with our USG Instructor Dr. Mike.
GET FEEDBACK

And Use It

WHAT IS THE POST-TRIP PLAN?

- Continuing medical education
- Quality assurance and improvement
- Put someone in charge
- Competence vs Credentialing
- Keep logs
- Keep track of education
- Create a method for oversight and feedback
- Remote QA

INTERNATIONAL EDUCATION FRAMEWORKS

- International Federation of Emergency Medicine (IFEM)
- Point-of-care Ultrasound in Low Resource Environments (PURE)
  - http://www.pureultrasound.org
- AIUM
  - http://www.aium.org
- World Health Organization
- American College of Emergency Physicians
  - https://www.acep.org/Clinical-Practice-Management/Ultrasound/Item.000019a74dec2c5e1e5ed1c866a1122
- Global Emergency Care
  - https://www.globalemergencycare.org
Meaningful change happens through partnership and relationships

Moira Bruce

Sonostuff.com

@Ultrasoundstuff

The Center for Ultrasound Excellence

Mike Schick on YouTube

UCDavisEM.com