International health workforce development enhancement in Senegal: The Peace Care partnership model

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### **Presenter Disclosures**

#### **Andrew Dykens**

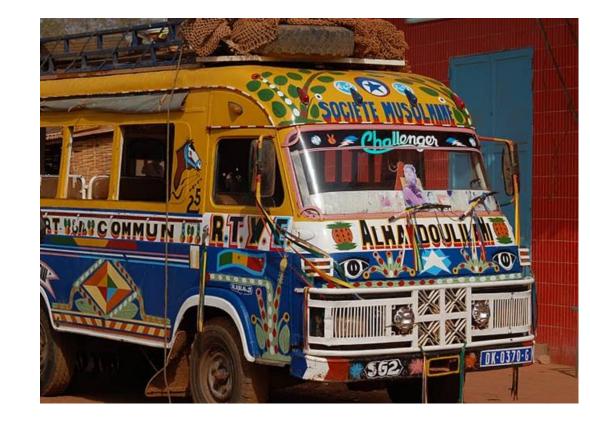
### (1) The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

Andrew Dykens is President of the Peace care organization, a not for profit 501c3 organization located in Chicago, Illinois.

# Objectives

- Introduction
- Process

   Philosophy
   Structure
- Our Project
  - o Background
  - o Content
- Project Outcomes
- Next Steps



### **The Peace Care Model**



Philosophy: Reduce health disparities through sustainable and community-based solutions

- Sustainable solutions should originate and be developed, primarily, with community involvement, through existing health systems, and with the use of appropriate technology.
- All solutions should prioritize capacity building within the local health care structure through the utilization and implementation of the principles of primary care and public health.

# **The Process - Philosophy**

A collaboration between the University of Illinois Department of Family Medicine, the University of Illinois at Chicago School of Public Health, the District of Saraya, Senegal, and the Peace Corps

- Addressing health disparities via
  - Primary care
  - Public health
  - o Partnerships



### **The Process - Philosophy**

A collaboration between the University of Illinois Department of Family Medicine, the University of Illinois at Chicago School of Public Health, the District of Saraya, Senegal, and the Peace Corps

- Goal to impact global health disparities by addressing
  - Global burden of disease
  - Shortage of healthcare workers
  - Paucity of primary care
  - Deficiency of global health research



# **Process - Project Structure**

- Peace Corps partnership and site selection
  - Need for improved health care capacity
  - Local community, existing health structure, and personnel desired a collaborative relationship
  - Existing dynamic relationship with Peace Corps
  - Peace Corps Volunteer (PCV) on site and integrated within the community, *and*
  - PCV in a position to communicate frequently and reliably by internet and phone.



# Introduction

- Continental Africa:
  - o 10% of the world's population
  - o 24% of the global disease burden
  - o 3% of the global health care workforce
- Sub-Saharan Africa:
  - Deficient 1.5 million workers that would be necessary to provide adequate health care to the continent
- Countries with better developed primary health care systems have been found to have better health outcomes



# **Our Project - Background**

- Site selection
  - The Health District of Saraya is located in the extreme South-Eastern part of Senegal with an estimated population of 42,000 inhabitants
  - Access to quality health care is difficult: geographically dispersed area, small number of highly trained individuals, lack of health centers/post (1 health center per 7 health posts)
  - Saraya village ~2,000 people
  - No cervical cancer screening in place in this district



# **Our Project - Background**

- Issue selection
  - Community health assessment through focus groups in surrounding villages (physicians, nurses, community health workers)
  - Additional issues identified by Chief Medical Officer at the district level

Clinical Topics: Cervical Cancer, STIs, Diarrhea

- Partnership Formation: August 2009 to January 2011
- Assessment: October 2010 – November 2010
- Project Development:
  November 2010 January 2011

# Senegal Stats - HPV & Cervical Cancer

- Population of 3.20 million women ages 15 years and older
- Approximately 1197 women are diagnosed with cervical cancer and 795 die from the disease.
- Cervical cancer is the most frequent cancer among women in Senegal (15-44 yrs)
- About 12.6% of women in the general population are estimated to harbor cervical HPV infection at a given time, and 43.6% of invasive cervical cancers are attributed to HPV 16 or 18



# **Our Project - VIA**

- 2-stage educational seminar teaching cervical cancer screening through application of acetic acid (<u>v</u>isual <u>inspection with <u>a</u>cetic acid)
  </u>
- Curriculum materials adapted from World Health Organization
- "Training of trainers" model

   5 trainers trained in original group
  - 14 health workers then trained by the trainers



### **Our Project: STI Treatment & Prevention**

WHO curriculum: Syndromic Approach to STI Management

- Adapted and introduced for
  - knowledge exchange
  - cross-cultural collaboration
- Participant group (15)
  - o 2 sage-femmes
  - o 12 nurses
  - o 1 physician



# **Our Project - Diarrhea Prevention**

- Diarrhea = 7th leading cause of death in Senegal
- Main causes cited as lack of:
  - Access to improved sanitation
  - Clean water source
  - Education regarding disease prevention
- Curriculum adapted from WHO publication, Facts for Life



# **Our Project - Diarrhea Prevention**

- Approx 100 participants in the village of Nafadji
- Group Q&A about diarrhea, its causes, prevention, and community education needs
- The "red pepper skit"
- Demonstration of making ORS
- "Cultural exchange"



# **Project Outcomes - Data**

Thus far, we have quantitative results only for the VIA component of our project.

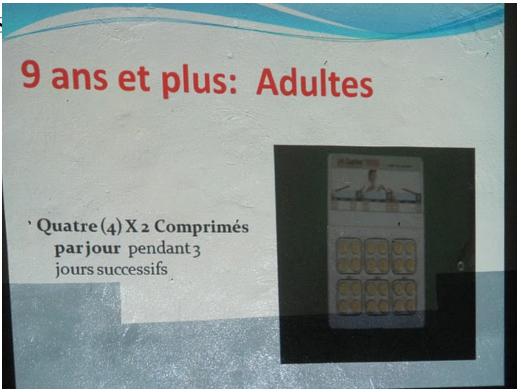
### VIA

- 79 women screened
- 2 women found positive
- 0 women found
   "suspicious" for
   cancer



# **Project Outcomes – Feedback & Exchange**

- Academic exchange
  - Lectures on malaria, tetanus and the structure of the health system in Senegal
  - Participation in health post clinical rounds
- Anecdotal feedback
- Cultural exchange



# Next Steps...

- Process and outcome evaluation
  - o Interviews and focus groups
  - Outcome evaluation for VIA to occur over the next few months
  - WHO recommended forms for quarterly data collection
  - Help guide national cervical cancer screening
- Dissemination
  - Publication and presentation of all results ad recommendations for future collaborative work



## Next Steps...

Future Collaborative Work for Cervical Cancer Screening in the Saraya District

- Two additional trainings in May and June to complete training of health workers
- Additional mass screening to raise awareness and improve clinical skills
- Further adapting documentation and screening guidelines
- Strengthen treatment plans

   Health services financing (transit funding for VIA-positive women)
   Initiation of cryotherapy
  - Expansion of palliative care services
- Continued collaboration with UIC



## Next Steps...

Cervical Cancer Screening for Senegal Health System

- Expand screening services to districts neighboring Saraya and throughout the Kedougou region.
- Formalize cervical cancer screening oversight and management within the national health system.
- Plan strategic expansion to neighboring regions with the intention of expanding throughout Senegal.



## Thank you for your attention!

### Questions?

