



# Online Interprofessional Education

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# Background

- Identified need for
  - Interprofessional education
    - Traditional BSN students
    - RN-BSN students
  - Focus on global health

# Interprofessional Education

- Traditional BSN students
  - Simulations
  - Clinical experiences
  - Class activities

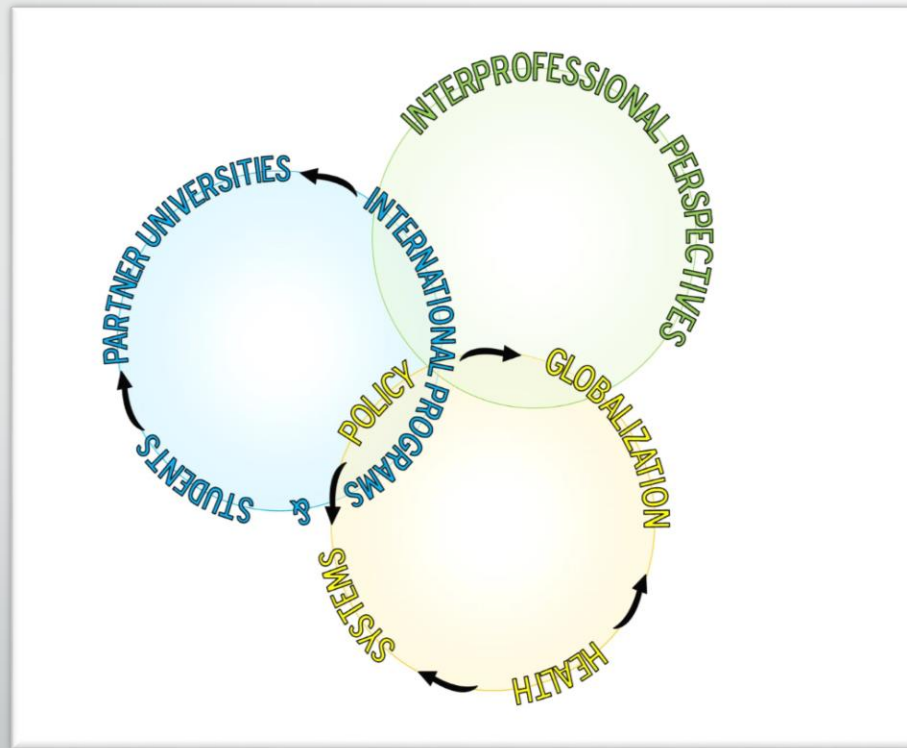
# RN-BSN Interprofessional Education

- Work in interprofessional environment
  - Lack skills for collaboration
  - Lack understanding of other professions
- Barriers
  - Online education
  - Asynchronous learning environment

# Course Development

- Opportunity
  - New general education package
    - global embedded requirement
    - Identified need for global health
- Endorsement by multiple programs
  - Required by 4 programs & open to others
- Developed by faculty from two different programs
  - Jeri Burger – nursing
  - Kevin Valadares – Health Administration
- Lots of coffee

# Conceptual framework



# Global Health

- Global health from different perspectives
  - Physical
  - Social
  - Social justice and stewardship of resources
  - Connections with local health and healthcare



# Interprofessional Education



# Group interaction

- Intentional groups
- Group discussion
- Group projects

# Groups

- Faculty assigned groups
- 4 – 5 students per group
- At least one non-nursing major in each group
- Team building activities
  - Introductions
  - Discussion Board – beginning awareness of cultural differences

# Group Discussion

- Social responses to global health
- Engagement – focus on current issues
- Epidemiology

# Group Projects

- Country Projects
- Poster Presentations

# Country Projects

- Explore assigned country
- Healthcare system
- Health
  - Social determinants of health
- Comparison to US
- Local implications

# Poster Presentation

- Social justice and Stewardship of resources
- Explore a topic related to the country
- Present using a PowerPoint Poster template



# Brazil: Food Security

Bonnie Roberts, Staci Sutton, Keith Hercamp, Christi Riggs

IPH: Interprofessional Perspectives on Global Health

University of Southern Indiana, 8600 University Blvd, Evansville, IN 47712

## Food Security:

**Food Security:** The World Health Organization since the 1996 Summit indicates that food security is present “when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life”.

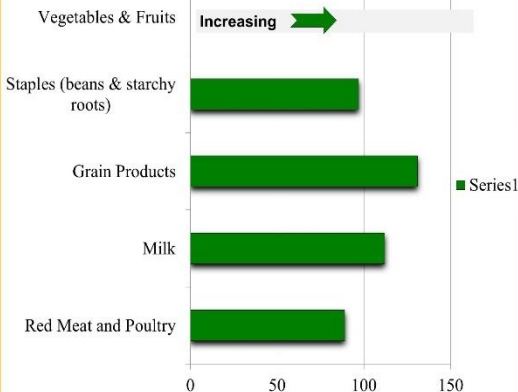
### Food & Agriculture Organization of the United Nations (3) Main Goals

- Eradication of hunger, food insecurity and malnutrition
- Elimination of Poverty
- Sustainable management of natural resources, such as land, water, air for future generations

### Brazil Facts

- Brazil is a member of the World Trade Organization
- Follow the Sanitary and Phytosanitary (SPS) Agreement and the CODEX principles
- Brazil is an upper middle-income country with a population of 191 million.
- Major food supplier to international markets supplying the U.S. with **15%** of the food supply

### Brazil Consumption in KiloGrams per Capita



\*<http://www.choicesmagazine.org>

## Implications for Health in Brazil

### Child Mortality

According to the WHO, **75%** of all child deaths are attributed to just six conditions: neonatal causes, pneumonia, diarrhea, malaria, measles, and HIV/AIDS. Child Mortality in Brazil affects **8.9%** of the total population.

### The healthcare resources needed to decrease child mortality:

- Increased accessibility to Primary Health Care for mothers and children
- Increase availability in Pediatric services
- Improved delivery care and neonatal care
- Increased availability and use of immunizations
- Increased education on nutrition, breast-feeding and good hygiene.



\*[http://who.int/features/factfiles/food\\_safety](http://who.int/features/factfiles/food_safety)

### Malnutrition

Malnutrition is a major health problem, especially in developing countries such as Brazil. According to The World Health Bank **6.9%** of the Brazilian population was undernourished in 2011.

### The healthcare resources needed to decrease malnutrition:

- Increase availability and affordability of healthy foods
- Educate children and adults about nutrition and healthy dietary practices
- Provide dietary counseling in primary health care
- Promote healthy foods in schools
- Increase in healthcare workers especially dietician's

## Ethical Considerations

### Fome Zero – “Zero Hunger”

- Fome Zero - Brazil's government strategy to guarantee the *right* of access to basic food
- Diverse programs from creating water cisterns to direct financial aid to the poorest
- Biggest initiative in Brazilian government to fight hunger

### Exporting food results in malnutrition

- In Northern Brazil, malnutrition affects over **13%** of the population
- Brazil is the leading exporter of beef, veal, and world largest exporter of soybeans

## U.S. Comparison to Brazil

According to the Economic Research Service, estimated **14.3%** of American households were food insecure in 2013.

UN Food & Ag Organization estimates more than 925 million people worldwide go to bed each night malnourished and hungry. Brazil's strides over the last 40 years has strengthened the links with the United States in food security.

According to FDA.org, the FDA develops regulations based on laws set forth in Food, Drug, & Cosmetic Act or other laws including the Family Smoking Prevention & Tobacco Control Act.

### “From the Field to the Table”

2011 FDA - **Food Safety Modernization Act** – Shifting from catching food safety problems to prevention across the food system.

### Food Stamp Supplemental Nutrition & Assistance Program

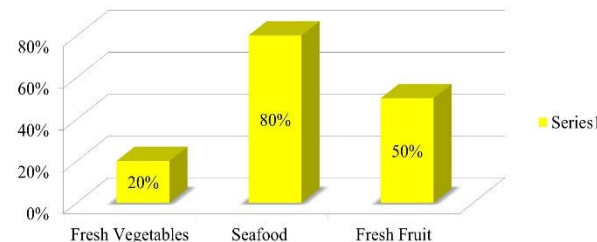
Food Stamp Program- Provide U.S. citizens in need with benefits to purchase food items such as milk and dairy products, fish, poultry, beans, cereals, infant formula and special diabetic food.

### Food Supplement program for women, infants and children (WIC)

Also offers to pregnant women and children under the age of five nutritious food (milk, cheese, fruits and vegetable) along with nutrition education.

### U.S. Imports 15% of the Total Food Supply

\* <http://www.fda.gov/Food/Guidance>



### Soybeans: Food vs. Fuel

- Brazil's increased growth in soybeans is to produce biodiesel instead of food

### Stewardship: Protecting the environment for Brazilians and others

- Soybean production in Brazil is destroying the *Rain Forest*
- Clearing the *Rain Forest* for agriculture releases more carbon than the biodiesel benefits
- Brazil is the world's 4<sup>th</sup> largest emitter of harmful Greenhouse Gases (GHG)



## References

Aliga, M. A.-D.-S. (2014). Food and nutrition security public initiatives from a human and socioeconomic development perspectives: Mapping experience within the 1996 World Summit signatories. *Social Science & Medicine*, 104, 71-79.  
 Department of Health & Human Services. (n.d.). *Food Stamp Program*. Retrieved November 12, 2014, from <http://www.dhs.gov/state/ah/us/dhs/foodstamp>  
 Fernandes, P. (2002). *Soybean cultivation as a threat to the environment in Brazil*. doi:10.1017/s0576892901000030

Food and Agriculture Organization of the United Nations. (n.d.). *The FAO Strategic Objectives*. Retrieved November 12, 2014, from <http://www.fao.org/about/en>  
 International Food Policy Research Institute (IFPRI). (n.d.). Retrieved November 12, 2014, from Food Security Portal: <http://www.foodsecurityportal.org/Brazil>  
 MacDonald, M. S. (2001). *Cattle, soybeanization, and climate change*. Retrieved November 12, 2014, from [www.brightsteege.org/files/brazil\\_bg\\_pp\\_2011.pdf](http://brightsteege.org/files/brazil_bg_pp_2011.pdf)

Taylor, M. (2014, November 5). *Food Safety in a Global Environment: Based on a Common Culture of Prevention and Verification*. Retrieved November 12, 2014, from <http://www.fda.gov/Food/GuidanceRegulation/FSMA/ann211685>  
 The World Health Bank. (2011). Retrieved November 2014, from <http://www.who.int/dh>  
 U.S. Department of Health & Human Services. (2014, November 4). *FDA Food Safety Modernization Act*. Retrieved November 2014, from <http://www.fda.gov/Food/GuidanceRegulation/FSMA/default.htm>

United States Department of Agriculture. (2011, December). *U.S. Food Safety Policy Enters a New Era*. (E. R. Service, Producer) Retrieved November 6, 2014, from <http://www.ers.usda.gov/pubres/2011/december/us-food-safety-policy-enters-a-new-era/>  
 Valdes, C. L. (n.d.). *Brazil's Changing Food Demand: Call for the Farm Sector*. Retrieved November 6, 2014, from <http://www.choicesmagazine.org/article.php?article=79>  
 World Health Organization. (n.d.). Retrieved November 12, 2011, from <http://www.who.int>

# Online Group Projects

## Making it Work

### Group Roles

- Group assigns roles and content areas
- Group Roles:
  - Leader
  - Informant Communicator
  - Finisher

### Content Assignments

- Introduction & conclusion
- Policy making & Health services: Access to healthcare and barriers to health care
- Social factors: Social & physical determinates of health
- Individual behaviors, biology & genetics



# Tools for Collaboration

## Education on Blackboard Tools

- File sharing
- Discussion Boards
- Journals
- Blogs

## Groups choose how to collaborate

- Blackboard tools
- Texting
- Skype
- Conference calls

# Teaching – Interprofessional

- Faculty co-teach the course
- Guest speakers from other programs
  - Nursing
  - Health administration
  - Informatics
  - Radiology Technology
  - Health services – epidemiology
  - Academic advisor with global health experience
  - International students

# Evaluation

- Attitudes toward Interprofessional Education
  - RIPLS Survey
    - Little change in attitudes toward interprofessional education
  - Anecdotal data
    - Enjoyed interaction
    - Challenge of group work

# Challenges

- Some students have little experience with healthcare
  - Difficult to explore perspectives of different providers
  - Learn skills in teamwork and collaboration
- Group work online
  - Communication! Communication! Communication!
- Large number of nursing students
  - RN-BSN
  - Traditional BSN
  - Some pre-nursing students

# Challenges with Interprofessional Teaching

- Different perspectives
  - See through different lenses
- Different teaching styles
- Experience with different student populations

# Lessons Learned

- Allow time for groups to form before first project
- Provide structure for group activities
  - Roles
  - Content areas
- Group and individual grading of projects
- Embrace all differences, not just interprofessional
  - Generational differences
  - Life experiences
  - Professional experiences
- Embrace diverse faculty perspectives

# Going Forward

- Study Abroad Opportunities
- Increasing demand
  - Experienced faculty help orient additional faculty
    - Keep the spirit of the course alive
- Faculty load
  - Combine online sections
  - Faculty assigned to one section with guest speakers
- Explore additional teaching methodologies
- Bring in speakers from the outside



Questions?