AMOS Health and Hope

A Community Based Primary Healthcare Approach to Water, Sanitation, and Hygiene (WASH) in Rural Nicaragua

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“In Nicaragua, a doctor shouldn’t just be a doctor; a doctor must also be a teacher.”

- Work alongside communities to improve health, education, and development

- Through partnerships AMOS seeks:
  - Health for all people
  - A world where no child dies of a preventable disease
  - Effective and empowering health care

Photos courtesy of AMOS Health and Hope
What is Community Based Primary Health Care?

• Health is a fundamental human right
• Inter-sectoral development
• Community Participation
• Requires and promotes self-reliance
• Community participation in planning, organization, operation, and control of primary health care
AMOS Community Based Primary Healthcare Model

1. Develop a relationship of trust
2. Define geographic boundaries
3. Identify community strengths

Courtesy AMOS Health and Hope
AMOS Community Based Primary Healthcare Model

1. Participatory Evaluation and Monitoring
2. Implement action plan
3. Build community capacity for program planning
4. Determine community priorities
5. Determine epidemiological priorities
6.  
7.  
8.  

Courtesy AMOS Health and Hope
AMOS’ Scope

- Water, Sanitation, and Hygiene (WASH)
- Maternal Care
- Child Care
- Holistic Health
- Clinic Care
- Community Development
- Lay Epidemiology
- Environmental Health

Courtesy AMOS Health and Hope
Global Health Practicum

- Nicaraguan cultural and historical orientation, intercultural development
- Introduction to critical theory, power and privilege, and critical consciousness; finding out social location
- Analysis of current models for global rural health care
- Burden of disease and AMOS interventions
- Millennium Development Goals (MDG’s), Sustainable Development Goals (SDG’s), Global Economics, and Neoliberal Policies: Impact on Nicaragua
- Introduction to CBPHC: History, Alma Ata, and Nicaragua; Introduction to Community Based Participatory Research (CBPR) Principles and Methodology
- A Review of Social Determinants of Health
- Introduction to Community Empowerment: Theory and Philosophy
- Development of public health skills through survey administration workshops
- Material validation
- Monitoring and evaluation, curriculum development, exposure to fieldwork and rural health care setting
- Child and maternal health interventions
- Clean water interventions
- Technical report, donor report, and community report development and presentation
- Cultural and Narrative Humility, Debrief, and Faith and Health
Global Health Practicum

- Ensure that missionary work, along with any public health intervention, does good and not harm
- We must still be concerned with forces like power, prejudice, and poverty – these too constitute forms of violence, as they cause people harm
- Even when approached with the best intentions, we can strip communities, especially indigenous ones, of their own cultures and practices
- Ethical public health work can and should provide another way

Global Health Practicum

http://www.rlmartstudio.com/product/liberation/


Is Cultural Competence Enough?

• What makes you competent in a culture?
  • Language
  • History
  • Social Norms
  • Cultural Activities

• How to practice cultural humility?
  • Lifelong learning and critical self-reflection
  • Puts parties in a mutually beneficial relationship and attempts to diminish damaging power dynamics
  • Institutional accountability

Slide courtesy of Desiree Sanabria
WASH in Nicaragua

• Nicaragua is 1 of 3 Latin American countries that is off track in the sanitation Millennium Development Goals

• Nicaragua has less than 50% rural sanitation coverage
Water, Sanitation, and Hygiene (WASH)

- Personal hygiene
- Home hygiene
- Use and management of water
- Use and management of latrines
- Proper waste management
- Protection of water sources and the environment
Water Promotors

Courtesy Jonathan Chen

Courtesy Jonathan Chen
Monitoring and Evaluation: Knowledge, attitude, and practice (KAP) and water filter surveys

Courtesy Lester Lorente

Courtesy Johnathan Chen
Monitoring and Evaluation: Geotagging

El Bambú
GPS data and filter status from El Bambú
6/28/16-7/1/2016
9 views
All changes saved in Drive

Add layer Share Preview

GPS Data El Bambú updated.xlsx

- Tiene filtro y funciona adecuadamente (26)
- No tiene filtro (4)
- No funciona adecuadamente (3)
- No esta en la casa (2)
- Destruído (1)
- OJO DE PRINCIPAL (CASERIO) (1)

Base map

EL LIBANO
Selicias
San Pedro

Courtesy Etienne Jaime
Logic Model Goals

• 80% of the families that live in the communities Banco de Sikia receive visits by the Water Promoters
• 80% of the houses checked had an adequate place to wash their hands
• 50% of the houses have gates in the main entrance and in the kitchen to block the access of animals to the inside of the house
• 80% of the houses provide proper maintenance to latrines
• 80% of the families properly remove the waste generated in their homes
• 80% of families that live in Banco de Sikia have a water filter or practice some method to improve water quality
• 80% reduction of recontamination of filtered water stored in recipients
My projects
El Bambu
Training and Baseline Data

Courtesy Johnathan Chen
El Bambu
Training and Baseline Data

Courtesy Jonathan Chen
Banco de Sikia
Impact Assessment and Results

- Community Health Worker: 77%
- AMOS Staff: 4%
- No response: 9%
- Their Parents: 2%
- Other: 8%
Banco de Sikia
Impact Assessment and Results

Handwashing in Banco de Sikia

- Proper Handwashing: 86% (2015) vs. 71% (2016)
- Inproper Handwashing: 14% (2015) vs. 29% (2016)
- Adequate Handwashing Area: 89% (2015) vs. 73% (2016)
Banco de Sikia
Impact Assessment and Results

Barriers to Households and Cleanliness of Latrines

<table>
<thead>
<tr>
<th>Barriers in Both Kitchen and Entrance</th>
<th>Clean Latrines</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015: 33%</td>
<td>2016: 84%</td>
</tr>
</tbody>
</table>

0% 10% 20% 30% 40% 50% 60% 70% 80% 90%

2015 2016
Banco de Sikia
Impact Assessment and Results

Elimination of Trash

- Proper Elimination of Trash: 72% (2015), 60% (2016)
## Banco de Sikia
### Impact Assessment and Results

<table>
<thead>
<tr>
<th>Method of Disinfection</th>
<th>Percent Change from 2015</th>
<th>Overall p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine</td>
<td>75% decrease in use from 2015</td>
<td></td>
</tr>
<tr>
<td>Filter</td>
<td>76% increase in use from 2015</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Sedimentation</td>
<td>2% increase in use from 2015</td>
<td></td>
</tr>
<tr>
<td>No Method Used</td>
<td>78% decrease from 2015</td>
<td></td>
</tr>
</tbody>
</table>
Banco de Sikia
Community Report
"If you give me a fish you have fed me for a day. If you teach me to fish, then you have fed me until the river is contaminated or the shoreline is seized for development.

But if you teach me to organize, then whatever the challenge I can join together with my peers and we will fashion our own solution.


Courtesy Jonathan Chen
MPH Foundational Competencies

• Evaluate policies for their impact on public health and health equity

• Apply awareness of cultural values and practices to the design or implementation of public health policies or programs

• Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings

• Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels

• Assess population needs, assets and capacities that affect communities’ health
MPH Foundational Competencies

• Interpret results of data analysis for public health research, policy or practice

• Communicate audience-appropriate public health content, both in writing and through oral presentation

• Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making

• Apply negotiation and mediation skills to address organizational or community challenges

• Perform effectively on interprofessional teams
¡Muchas Gracias!

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- Raghu Amachawadi, T.G. Nagaraja, M.M. Chengappa
- Friends and Family
Questions?
http://www.amoshealth.org/
References

- Shaffer, Roy. 1986. 'Beyond the Dispensary (On Giving Community Balance to Primary Health Care)', African Medical and Research Foundation: 25-27.