Summer 2014 Public Health Projects in Dominican Republic

By Isaac Michaels

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Background

• Volunteered with CSA last year as part of a 10-day service learning trip with the UAlbany Global Health Center
• Wanted to return to work on larger projects
• Developed a summer internship
Background

• 3-Credit Internship
• 2 Months
• Three Phases
  – Intensive Language Training and Historical/Cultural Education (2 weeks)
  – Epidemiology Project in El Cerrito (2.5 weeks)
  – Public Health Projects in Batey Lecheria (3.5 weeks)
Location 1: El Cerrito
Background

• Unidad de Atencion Primaria El Cerrito
• Remote rural area
• Presently no electricity/computer access
• Serves a low SES community
  – Haitian migrant workers
  – Sugar cane
  – Corporation owned housing
Objectives

• Measure prevalence of housing-related health determinants
• Define and identify disparities between parajes (i.e. localities)
Methods

• Ficha Familiar health records
• Data entry
• Scoring system
• MS Excel
• Disparity definition
Results

• Analysis completed
• Disparities identified
• Results presented in greater detail in a full report
Discussion

• Possibility of selection bias
• Validity of occupant data
• Need for future projects to improve the sample and data quality
Conclusions

• The analysis found that deficits in housing quality are a prevalent public health risk in the target communities

• Proposal of three public health goals

• Potential future projects/interventions
Location 2: Batey Lecheria
Background

• Batey
• More urban than El Cerrito
• Near Los Alcarizos
• Site of the Alerta Joven Project
• Prevalent public health risks
  – Low SES
  – Poor sanitation
  – Others
Objectives

• Assist health clinic with improving operational efficiency
• Assist with community health initiatives
Methods

• Information Gathering
  – Observed health clinic operations
  – Toured the community
  – Spoke with clinic staff and community members to better understand the epidemiology of the batey
Methods

• Collaborated with clinic staff and a visiting physician
• Carried out two workflow projects and one community health project
Results

• Computer integration in the clinic pharmacy
  – Created a user-friendly spreadsheet with automated analytics and reporting
Results

• Improved clinic accounting system
  – Consolidated computer files
  – Made a user-friendly system for generating cashflow statements, as well as monthly and semi-annual financial reports
Results

• Collaborated in development of a hypertension monitoring pilot
  – Created new data entry forms (paper and digital)
  – Development and evaluated data collection protocols
    • Worked with clinic staff on implementation
  – Developed long-term development goals for the pilot
### Programa de Hipertensión Cindy

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<th>Nombre</th>
<th>Edad</th>
<th>Sexo</th>
<th>Tensión</th>
<th>Medicamentos</th>
<th>Hay?</th>
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**Instrucciones para el Programa:***

1. **Nombre:** Ingrese el nombre del paciente.
2. **Edad:** Ingrese la edad del paciente.
3. **Sexo:** Ingrese el sexo del paciente (M o F).
4. **Tensión:** Ingrese la tensión arterial del paciente.
5. **Medicamentos:** Ingrese los medicamentos prescritos para el paciente.
6. **Hay?** Indique si hay medicamentos en el paciente.
7. **Notas:** Ingrese cualquier otra información relevante.

**Nombre de la Paciente:** __________

**Fecha:** __________

**Colombia Medellín 2023**
Discussion

• Opportunities for follow-up projects and future collaboration
Conclusions

• Opportunities for IT integration in health clinic
• Opportunities for scaling proactive community health initiatives
• Importance of prioritizing public health (especially sanitation) ahead of reactive medical care
MPH Competencies

• Identify key sources of data for epidemiological purposes.
• Describe a public health problem in terms of magnitude, person, time, and place.
• Calculate basic epidemiology measures.
Helpful Courses

• EPI 501 – Basic epidemiological measures
• EPI 502 – Data quality; selection bias
• EPI 514 – Algorithms involving embedded functions and conditional statements
• EPI 617 – Bi-directional value exchange; Health IT for decision support and workflow integration
• HPM 525 – Social determinants of health
• EHS 590 – Environmental determinants of health
Professional Development

• This experience has helped my professional development through:
  – Affirming my interest in global public health projects
  – Affirming my interest in using entrepreneurship for scaling public health interventions and addressing unmet need
  – Spanish language acquisition
Acknowledgements

Special thanks to the following people:
• Community Service Alliance, D.R.
• The University at Albany School of Public Health and the Center for Global Health
• Unidad de Atencion Primaria El Cerrito
• The Alerta Joven Project
• Student volunteers of PUC Schools
• Visiting public health group from Calgary University
Questions