Acute Clinical Conditions of School-Aged Children in a Rural Kenyan Community

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Disciplines
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Comments
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To view the Building Futures-Building Health video, click here.
Acute Clinical Conditions of School-Aged Children In a Rural Kenyan Community
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Objective
To better prepare future mission outreaches to rural Kenyan villages by providing information regarding common acute ailments.

Introduction
Each year the number of people who participate in short-term mission trips sharply increases. In 2004, it was reported that at least four million short-term mission trip participants were being sent out on a yearly basis. For the last three years, St. John Fisher College has been organizing and implementing a medical mission trip to a rural village in Kenya, Africa. In May 2011, a team comprised of 19 health practitioners and students participated in a two week mission. This project served as part of an elective advanced practice experience for a fourth year pharmacy student. The team conducted a one day outpatient clinic in Maseno, which is located in a western province of Kenya. School children and local Kenyans living around the Mbaka Oromo Primary school were observed and treated if necessary at this clinic.

According to current published statistics, approximately half of all deaths caused by infectious diseases in third world countries can be attributed to tuberculosis, malaria and AIDS. During our mission clinic, we observed the most common acute ailments in the local Kenyan people.

Mission trips provide a great opportunity for pharmacy students to encounter and interact with patients of different ethnicities, languages, socioeconomic statuses, cultures and education levels. The skills learned prior to and during these short-term missions are applicable to a pharmacists everyday job in their own communities. These trips open many doors and allow students to step out of their comfort zone which is the best way to improve skills that can be used on a day to day basis.

Methods
• An outpatient clinic in Maseno, Kenya primarily focused on treating school-aged children was conducted by a team of health professionals from the United States.
• Individual patient treatment cards were prepared for each patient that attended the clinic to include:
  • Age
  • Height & Weight
  • Chief Complaint
  • Physical Exam Findings
  • Diagnosis
  • Treatment
• Upon return to the United States, patient treatment cards were compiled and analyzed to determine the most common acute clinical conditions.
• Chronic diseases such as HIV, diabetes and hypertension were not addressed at this ambulatory clinic.

Results
• A one-day outpatient clinic was conducted by a team of 19 health professionals and students from St. John Fisher College, including two pharmacy students.
• Four hundred and eighty-nine patients were seen at the clinic.
• The two most common clinical conditions observed at the clinic were tinea capitis and chiggers.
• Remaining clinical conditions included fungal rash, trachoma, upper respiratory infection, wound infection, arthritis, allergic rhinitis, otitis media, gastroenteritis, thrush, strep pharyngitis, allergic conjunctivitis and urinary tract infection.

Clinical Conditions Prevalence (%)
Tinea Capitis 31.2%
Chiggers 18.8%
Fungal Rash 4.7%
Trachoma 2.2%
Upper Respiratory Infection 1.6%
Wound Infection 1.4%
Arthritis 1.4%
Allergic Rhinitis 1.2%

Conclusions
Pharmacists have a unique opportunity to help the people in third world countries by participating in medical mission trips. By collecting data at the clinic regarding commonly observed acute ailments, future missions to rural Kenya will have greater insight regarding what to expect when working at these clinics. As a result, health care students and professionals conducting future mission trips to Kenya will be more prepared to treat the most common ailments present in the region.

Acknowledgements
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References:

A Kenyan child in the pharmacy receiving mebendazole and a multivitamin
The “pharmacy” counter during our mission clinic at Mbaka Oromo Primary School

Observed Clinical Conditions

No Ailment 31.5%
Tinea Capitis 31.2%
Chiggers 18.8%
Fungal Rash 4.7%
Trachoma 2.2%
Upper Resp Inf 1.6%
Wound Inf 1.4%
Arthritis 1.4%
Allergic Rhinitis 1.2%
Other 0.7%
No Ailment 0.7%