Delivering Palliative Care in Sub-Saharan Africa - what we can learn from resource-limited environments
# Impact of Resource-Limitation on Health

<table>
<thead>
<tr>
<th></th>
<th>Africa</th>
<th>World</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life expectancy-yr.</td>
<td>53</td>
<td>71</td>
<td>78</td>
</tr>
<tr>
<td>Mortality/1000 pop</td>
<td>14</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Mortality age 15-60</td>
<td>39</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td>Mortality Infant</td>
<td>76</td>
<td>42</td>
<td>7</td>
</tr>
<tr>
<td>Doctor/10,000 pop.</td>
<td>2</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>Nurse/10,000 pop.</td>
<td>11</td>
<td>28</td>
<td>98</td>
</tr>
<tr>
<td>Monthly per capita income $</td>
<td>137</td>
<td>863</td>
<td>2338</td>
</tr>
</tbody>
</table>
Hospice-relevant diseases in Africa

- HIV/AIDS
  - Africa - 12% world population - 70% of world burden
  - ARV penetration 36% (rx starts at CD4 ~ 150)
- Cancer top five
  - Cervix, Breast, Liver, Kaposi’s, Prostate
- TB - 193/100,000
- Hepatitis B – 10% population prevalence
- 44.7% of countries have any palliative care
Organization of Medical Care in Uganda

- Hierarchical structure
  - Volunteer village health team workers (VHT) – 1/200 villagers
  - Village health stations
  - Regional referral centers
  - One national hospital (Mulago, affiliated with Makerere University) in Kampala – only place in the country where chemo and radiation are available

- Few private hospitals in Capitol and in 2-3 regional centers – market towns
A typical hospital in Uganda

- Large open wards
- Insufficient number of mosquito nets
- Your family comes with you and provides food, bedding, clothing and ADL care. They sleep on mats under your cot.
Sine Qua Non for Palliative Care

- Access to pain medication
  - cheap
  - effective
  - easily titratable – liquid morphine
- Non-physician prescribers
- Nurse-driven care
- Home-based
Hospice Africa Uganda
Morning Prayer
Team meeting
Tea
Heading out on homecare
<table>
<thead>
<tr>
<th>Liquid morphine – 3 concentrations starting with 5mg/5ml</th>
<th>Metronidazole</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetaminophen</td>
<td>Cloxacillin</td>
</tr>
<tr>
<td>Amitriptyline</td>
<td>Amoxicillin</td>
</tr>
<tr>
<td>Bisacodyl</td>
<td>TMP/SMO</td>
</tr>
<tr>
<td>Dexamethasone</td>
<td>SUPPLIES</td>
</tr>
<tr>
<td>Diazepam</td>
<td>Syringes, tape, gauze, cotton, lube</td>
</tr>
<tr>
<td>Furosemide</td>
<td>Bladder catheters, urine bags,</td>
</tr>
<tr>
<td>Ibuprofen</td>
<td>Flashlight, gloves, hand sanitizer</td>
</tr>
<tr>
<td>phenytoin</td>
<td>Thermometer, BP cuff</td>
</tr>
</tbody>
</table>
Dining Area
Cross-cultural adaptations

- Warm and formal
- Language barriers
- Family structure...I have one father who...
- The Uganda clock
- African time
IHPCA Current Research

- Prevalence of depression in hospice patients
- Validation of a spiritual health assessment tool (Spirit 8)
- Validation of the Jerry Can visual for pain assessment
- Comparison of symptoms and pain severity between HIV-Cancer and Cancer-only patients
IHPCA Research Agenda

- Overcoming challenges to disseminating use of oral morphine
- Increasing access to palliative care in Africa
- Cost-benefit analysis of palliative care Uganda and Sub Saharan Africa
- Changing disease trajectory of HIV in palliative care
- Clinical tool development
  - Assessing palliative care emergencies
  - Pain assessment in the non-verbal patient
- Which local herbal remedies are effective
Moving up to Nabugoye
Visiting Namonyoni
Mbale Regional Hospital Palliative Care Program
How MRH is growing

- Walking outreach
- Via VHT – ‘take us to the people in your village who are in pain and unable to leave home’
- Costs
  - Airtime for cell phones
  - Lunch and transport on working days
  - Internet time
- Current census 60 patients in 2 villages
Future plans for MRH Hospice

- Find a hospice partner via NHPCO
- Add more VHTs to add more patients
- Add a nurse to the MRH palliative care staff
- Get a vehicle
Lessons

- Much can be done with little
- Things take time
  - If I want to travel fast, I travel alone.
  - If I want to travel far, I travel with others.
- Learn the language and behave humbly
- Input from village health team or patient/community navigators is essential