Global Oncology: Nursing Outreach Efforts
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Learning Objectives

• Illustrate the need for global outreach efforts in oncology
• Discuss the importance of nurses in global outreach efforts targeting cancer care
• Outline the rewards and challenges associated with global outreach efforts targeting cancer care
World Cancer Day
February 4, 2016
Butaro Hospital
Rwanda
ARS Question #1

Only trained oncologists can treat cancer patients in low and middle income countries.

1. True
2. False

ARS Question #2

What percentage of cancer deaths occur in low and middle income countries?

1. 10%
2. 50%
3. 70%
4. 95%
World View

- 2012
  - 14 million new cases of cancer
  - 8.2 million deaths
- New cancer cases expected to increase 70% over the next 2 decades
  - More than 60% in low and middle income countries (LMICs)
- More than 70% of cancer deaths occur in LMICs
- Cancer causes more deaths than HIV, TB and malaria combined
- LMICs < 5% of the global health care resources yet bear the majority of the cancer burden

Call to Action

United Nations 2011 Summit on Non Communicable Diseases
- Heart disease, diabetes, obesity, cancer
  - Focus on Prevention
  - Tobacco control, obesity control, alcohol
- Claim that 1/3 of cancers are preventable
  - Pediatric cancers
  - What about the people with potentially curable, non-preventable cancers

World Health Organization
- Essential Medication List
  - Comprehensive review in 2015; 29 diseases reviewed, and 16 medicines added to list
- Cancer devices – guideline work underway
  - Pathology, surgery, imaging, radiation therapy, systemic therapy, palliative care

World Cancer Leaders Summit UICC 2014
- Coordination of oncology efforts, focus on funding, tumor registries

Institute of Medicine
- October 2015 and ongoing sessions in 2016
Low/Middle Income Countries

- Cancer awareness is low
- Access to screening and early detection limited
- Stigmas exist
- Treatment facilities rarely exist
- Poverty restricts ability and access to receive treatment
- As communicable diseases decrease, cancers coming to the forefront

Lessons Learned from HIV?

<table>
<thead>
<tr>
<th>Question</th>
<th>HIV</th>
<th>Cancer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is HIV (cancer) a death sentence?</td>
<td>No, can be successfully treated.</td>
<td>Many cancers are treatable and sometimes curable</td>
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<tr>
<td>Is it too dangerous or complicated to treat HIV (cancer) in LMICs?</td>
<td>No, successful programs all over the world</td>
<td>It is possible and important to treat cancer in poor places</td>
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<tr>
<td>Is HIV (cancer) treatment too expensive?</td>
<td>HIV costs affordable</td>
<td>Actually, medicines and services can be provided in affordable, safe ways</td>
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<td>Do you need specialists in LMICs to treat HIV (cancer)</td>
<td>Incredible movement to train nurses and CHWs to care for HIV patients</td>
<td>Cancer care requires many health workers along the continuum, including GPs, nurses, pharmacists, CHWs, policymakers, etc.</td>
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Global Funding for HIV/AIDS Increases Dramatically

Global Health Delivery Partnership, Harvard University.

HIV/AIDS Response in Rwanda

The AIDS Response in Rwanda, 2002-2012

Butaro Cancer Center of Excellence

Rwanda

• Population of 11 million people
• Size of Maryland
• Kigali - Capital City
• Densely populated
• Official Language
  • English
  • Kinyarwanda
  • French
• Land of a thousand hills
**Health Care in Rwanda**

MOH invited PIH in 2005

PIH provided health care to 800,000
1 MD and no functioning hospitals

Today
PIH has presence in:
- 3 districts
- 3 district hospitals
- 72 health centers

**A Comprehensive Cancer Center in Rwanda**

Rwanda MOH

Butaro Cancer Center of Excellence (BCCOE) was inaugurated as the first national cancer referral facility in rural Rwanda in July 2012

Aerial view of Butaro Cancer Center of Excellence and surrounding countryside. Photo credit Matthew Craven.
Patients Registered in Cancer Program per Year

Year

Number of Patients

Pediatric

Adult

OCT 2015

2014

2013

2012

Pediatric Cancer Cases through August 2015

Confirmed Diagnosis and Clinically Suspected Cases

Eligible for XRT

Not currently eligible for XRT
Adult Cancer Cases through August 2015

Confirmed Diagnosis and Clinically Suspected Cases

- **Not currently eligible for XRT, large impact**
- **Currently eligible for XRT**
- **Not currently eligible for XRT, smaller volume**

Cases

- **Global Oncology Nursing**
Accompaniment

• “To accompany someone,” he said, “is to go somewhere with him or her, to break bread together, to be present on a journey with a beginning and an end… There’s an element of mystery and openness… I’ll share your fate for awhile, and by ‘awhile’ I don’t mean ‘a little while.’ Accompaniment is much more often about sticking with a task until it’s deemed completed by the person or person being accompanied, rather than by the accompagnateur.”

Paul Farmer

Rwanda Nursing Timeline
1st Baseline Cancer Training for Nurses

DFCI/PIH Nursing Fellowship

- Started April 2012-present
- 3 years of 3 month rotations
  – Nurses backfilled at DFCI
- April 2015- year long nurse
- Cost -$120,000/year
Standard Operating Procedures

IV care and maintenance
Wound Care
Infection Control Practices
Hypersensitivity reactions- stat box

Meticulous Calculations

Double checks
BSA, orders, doses
Drug prep
Labels
Chemotherapy Mixing

• Calculations
• Double checks
• Personal Protective Equipment (PPE)

Chemotherapy Administration

• Templated chemotherapy orders
• Double check at bedside
• Patient assessment for toxicity
• PPE
• Use of competency checklists
Patient Assessment & Education

Leadership
Interdisciplinary Collaboration

Nursing Training Courses

• Rwandan nurse identified as Oncology Nurse Educator

• New nurses to Butaro
  – 3 week program
  – Ongoing support

• MOH Training
  – 12 week program

• Collaborating with University of Rwanda for Master’s in Nursing/Oncology Track
Breast Cancer Research Project

- Butaro Oncology Nurse Coordinator
  - Integral part of breast cancer screening, early detection and referral research project
  - Training of Health Center nurses and CHWs
  - Trained to perform core biopsies

Funded by Breast Cancer Research Foundation

Other Nursing Contributions

- General organization
  - Medical records
  - Schedule for outpatient clinics
- Treatment protocol updates & refinements
- Supply chain
- Chemotherapy waste disposal
- Defining Workflows
- Patient Follow up
- Quality Improvement projects
- Professional mentorship
  - Abstract submission
Hosting our Rwandan Colleagues

Audience Response Question

Are you ready to answer?

NCCN.org – For Clinicians | NCCN.org/patients – For Patients
ARS Question #3

A nurse participating in the Dana Farber Cancer Institute/Partners in Health Nursing Fellowship at the Butaro Cancer Center in Rwanda might experience the following challenges:

1. Limited imaging and lab services
2. Language barriers
3. Cultural differences in nursing care (i.e. pain management, eduction)
4. All of the above

Challenges of Nursing in LMICs
Economic Challenges

- **Staffing**
  - Initially unit understaffed for volume
    - 8 to 26 FTE in 2.5 years
- **Patients**
  - PIH offers assistance for transport and food
  - National Insurance – Mutuelle (pts pay very small %)
- **Clinical Services**
  - No radiation, limited imaging and lab services
- **Clinical Supply Stock outs**
  - drugs, IV pump tubing
- **Potable water**

Cultural & Nursing Differences

- **Open wards**
  - Men, women and children
  - Toilet facilities
- **Different concept of Nursing**
  - Nursing duties and organization
  - Garde malade
  - Pain management
  - Levels of education
  - Lack of management structure and accountability
Language

• Local language Kinyarwanda
• French was official language and many educated people still use.
• English now official language. Students are learning in schools.
• Staff resources used for translation
• Teaching more cumbersome due to need for translation

• Less ability to communicate personally and professionally with staff and patients

• Nurses translated between MD & patient, good way to learn

Feedback

• Thank you so much for congratulating me. It is true, I finished my Bachelor’s school in general nursing and I graduated on July 25th. It was very hard to combine studying and working and I AM VERY PROUD OF BEING BACHELORS NURSE!

• My dream now is to become a qualified oncologist nurse. Unfortunately, we don’t have specialty or Masters in Rwanda.

• What I am today is from you.
The Reward

Surgery + 48 weeks of chemotherapy
Cyclophosphamide
Vincristine
Dactinomycin  Cost < $700.00

Summary

• 150 Nurses attended Baseline cancer training
• Over 45 different Rwandan nurses have been trained to work at Butaro Cancer Center
• Butaro nurses:
  – Understand what cancer is and how to treat it
  – Safely mix and administer chemotherapy according to agreed upon treatment protocols and standard operating procedure
  – Monitor patients for side effects and intervene appropriately
• Master’s program underway
• Standard workflows in place for ward and ambulatory center
Summary
Nurses will play a critical role in addressing the cancer burden in LMICs

- Cancer Education
- Screening and early detection
- Administering treatment and monitoring for side effects
- Using evidenced based practice
- Nursing research within country context
- Survivorship
- Palliative Care
- Leadership mentoring
- Quality Improvement strategies
- Workflow design
- Patient Advocacy

The Future
It is our social, moral and ethical responsibility to help LMICs fight the war on cancer.

If not us, then WHO?
Thanks

NCCN Member Institutions