A Glance into Global Cancer Care

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Objectives

• Discuss current health care environment in Zambia as it relates to cancer care.
• Present a global overview of cancer care service as compared to the United States
• Identify global issues/challenges around patient safety
• Discuss the impact of quality nursing care
• Discuss the importance of educating nurses to deliver high quality care for the patients
• Identify ways to assist in oncology nurse development in Zambia and globally.
The Team
Cancer Health Care in Zambia

• History – Cancer Diseases Hospital
  – Dream started in 1982
  – Increase in number of cancer cases seen
Economics

– Zambia felt like they needed a specialist hospital
  • To decrease costs
  • To increase access to care
    Due to a lack of budgetary allocation the project was delayed for many years
– The cost implications were about $10,000 per patient sent for treatment abroad to Zimbabwe or South Africa
– Limited budget for treatment abroad only allowed for about 550 cases out of 5,000 that required radiotherapy to be sent abroad between 1995 and 2004.

(Maliti, 2012)
Progress

• In 1995 – plans firmed up to establish cancer care in Zambia at the University Teaching Hospital in collaboration with the International Atomic Energy Agency (IAEA)
• Construction was completed in November of 2005
• Installation of equipment was completed February 2006

(Maliti, 2012)
• Clinical activities started on April 12\textsuperscript{th} 2007
• Officially opened by the late President His Excellency Levy Patrick Mwanawasa, State Counsel on July 19\textsuperscript{th} 2007
Provider Care

- Four radiation oncologists
- Seven radiation therapist
- Two medical physicists
- Five nurses were later sent for 2 year specialization in oncology nursing in 2008, completing in 2010

(Maliti, 2012)
Cancer in Zambia

- The most common cancers are cervical, Kaposi Sarcoma, bladder, prostate and breast.
- Zambia has the second highest incidence of cervical cancer in Africa. (Tanzania)
- Cervical cancer ranks the 1st most frequent cancer in women in Zambia.
- Zambia has a population of 3.17 million women ages 15 years and older who are at risk of developing Cervical Cancer.
- Approximately 1,650 women in Zambia are diagnosed with cervical cancer every year and 1,340 die from the disease (about 81%).

Cancer Diseases Hospital

• Grant aided tertiary or third level specialist government institution
• Serves as national referral hospital
• Catchment population:
  – all the districts
  – 9 provinces of Zambia
  – Referrals from neighboring countries - Malawi, Angola, Democratic Republic of Congo
Services Offered

- Consultation
- Chemotherapy and hormonal therapy
- Radiotherapy
- Palliative care
- Diagnostics

- Compared to US
  - Research
Diagnostics Available

- Linear accelerator
- Cobalt 60
- Orthovoltage
- High dose brachytherapy
- Treatment Planning system
- Conventional simulator
- Mould room and work shop

- Laboratory services
- Mammography
- Ultrasound
- CT scan
- MRI – the first one in Zambia, commissioned and installed in July 2010

- (Maliti, 2012)
## Compared to the US

### External Beam RT
- 3D CRT
- IGRT - RapidArc
- IMRT
- Superficial
- Total Body Irradiation (TBI)
- Total Skin Irradiation (TSI)

### Stereotactic Radiosurgery
- Gamma Knife (SRS)
- Stereotactic Body Radiation Therapy (SBRT)

### Brachytherapy
- HDR
- LDR
- Pterygium

### Radioisotope Therapy
- New research medicines
- Radioimmunotherapies
- Therapeutic isotopes
Clinical Activities

• 2006 – 37 patients
• 2007- 719 patients
• 2008 – 1,204 patients
• 2009 – 1,291 patients
• 2010 – 1,282 patients
• 2011 – 1,332 patients
• Total 5865 patients since it opened
Challenges for patient safety

- Shortage – nursing and specialists
- Lack of specialty education
- Lack of supplies
- Risk to nurse and patient
- Access to care
Impact of quality oncology care

- Increased access to care
- Better patient education
- Improved patient satisfaction
- Cost-effectiveness
- Patient compliance
- Fewer hospital admissions
- Decreased lengths of stay, readmission rates, emergency care visits, and healthcare costs

(Brooten & Naylor, 1995; Cunningham, 2004; Fulton & Baldwin, 2004).
Importance of oncology education

- Seminars in Oncology for staff
- Concepts for education structure for an oncology nurse program at the University
- Resources available
  - Faculty
  - Books
  - elearning
ONCOLOGY DEVELOPMENT
The Future

– Develop oncology nursing programs
  • Current and future programs
  • Content
– Be a faculty resource
– Provide resources for their development
– Mentorship in nursing
– Research opportunities
Global Cancer Research Efforts

• Gather reliable statistics on cancer incidence and mortality
• Investigate the causes of cancer that are currently unknown
• Evaluate preventative strategies to see whether they work in practice
• Assess barriers to implementing prevention in practice – why aren’t people coming for screening?

World Cancer Congress, 2012
- Globally - Cancer is not an old person’s disease
- Heaviest incidence occurring in people age 30-69
- “if worldwide action is not taken, cancer incidence will likely increase by 70% in middle-income countries and 82% in lower-income countries by 2030”

World Cancer Congress, 2012
Thank you!