Improving cancer management in a resource limited setting

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Radiotherapy in cancer care

Radiotherapy

- Safe
- Cost effective
- Necessary
More than half of all patients with cancer will require radiotherapy...

- SAFE
- COST EFFECTIVE
- NECESSARY
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< $ 1,500

http://globalrt.org/
More than half of all patients with cancer will require radiotherapy...

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- Cost effective
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40% of cured cases

50% < $1,500

http://globalrt.org/
Radiotherapy in Cancer Care

In high income countries
- 120,000 people are served by a single radiotherapy machine

In middle income countries
- 1 million people are served by a single radiotherapy machine

In low income countries
- 5 million people are served by a single radiotherapy machine
The global scenario...

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<thead>
<tr>
<th></th>
<th>LIC</th>
<th>L-MIC</th>
<th>U-MIC</th>
<th>HIC</th>
<th>World</th>
</tr>
</thead>
<tbody>
<tr>
<td>% countries No RT</td>
<td>77%</td>
<td>22%</td>
<td>7%</td>
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</tr>
<tr>
<td>Access-coverage %</td>
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...and the problematic area

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RT in Africa (2017)

30/53 countries NO RT...

Only 35-45% of the needs covered...
RT in Africa (2017)

SITUATION SCANDALEUSE : Une seule vieille machine de radiothérapie contre le cancer au Sénégal

La seule machine de radiothérapie est en panne en Ouganda
Global Access to Radiotherapy Services: Have We Made Progress During the Past Decade?

Yap, Zubizarreta, Bray, Ferlay, Barton. JGO 2016

In LICs and LO-MICs, the small increase in MVMs in the last decade has lagged behind the greater increase in cancer numbers, leading to an increase in the gap in services. The majority of LICs have no radiotherapy services available at all.

Our RTU estimates are conservative because they were not adjusted for the different distributions of stages at cancer presentation in each country. Pa...
RT in Zambia 2002-2007

✓ $5.6 million loan from the OPEC Fund for International Development
✓ Construction and procurement of equipment
✓ Whole RT team trained in South Africa
RT in Zambia 2002-2007-2017

- $5.6 million loan from the OPEC Fund for International Development
- Construction and procurement of equipment
- Whole RT team trained in South Africa
- Expansion of the RT department and oncology centre
- Establishment of local training for RTTs and ROs
- Plan for additional expansion and additional RT centres (Mpika and Kitywe)
Why local training is essential?

Cost (abroad) € 50-68k per professional/year
Why local training is essential?

Cost (abroad) € 50-68k per professional/year
In conclusion: what is needed?

- Political stability
- Governmental commitment
- Medium term plan
- All trained professionals retained
- On-site training
- Maintenance contracts