Surgery at 2 district hospitals in Ghana:
A cross sectional, retrospective review of major operations at Kintampo Municipal Hospital and Axim Government Hospital

Nnenaya Agochukwu
MS4
Louisiana State University School Of Medicine
2012 GE- NMF
Outline

• Background
• Methods
• Results
• Conclusions
• Future steps
• Acknowledgements
Surgery at the District Hospital

- First level of referral care

- 11% of world’s disability adjusted life years (DALYs)
  - Highest burden- LMICs

- Poorest countries- 1/3 world population
  - 3.5%
• Investments- cost effective, mainly at district

• Few studies to assess number and types of surgical staff and procedures

• Goal: document and address gaps
• Ghana shares challenges of most developing countries
  – 30% of population $1.25 per day
  – 54% literacy rate
  – 11% children die before age of 5
  – High maternal mortality
  – 1.5 physicians per 10,000
Surgery and Global Health: A View from Beyond the OR

Paul E. Farmer · Jim Y. Kim

- Neglected stepchild of public health
- Are there no surgical services available in the 3rd world?
- Minor surgical pathologies transform
- World’s bottom billion
Why the inattention?

- International health dominated with communicable diseases.
- Surgical disease not communicable
- Means test
- Now, surgeons involved
- Surgery is a highly complex intervention
Methods

• Logbook at both district hospitals 2004-2012 (Jan-Mar)
  – Demographics
  – Date
  – Diagnosis/condition
  – Major operation done
  – Patient ID

• Database
• Human and physical resources
• Questionnaire for head theatre nurse
Theatre human resources for major operations

• Kintampo
  – 2 physicians
  – 2 nurse anesthetist
  – 3 nurses
  – 2 scrub technicians/orderlies

• Axim
  – 1 physician
  – 2 nurse anesthetist
  – 2 nurses
  – 1 ward assistant
  – 1 orderly
Physical Resources
Kintampo
Axim
<table>
<thead>
<tr>
<th>Year</th>
<th># total operations Kintampo</th>
<th># total operations Axim</th>
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<tbody>
<tr>
<td>2004</td>
<td>61</td>
<td>38</td>
</tr>
<tr>
<td>2005</td>
<td>152</td>
<td>124</td>
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<td>2006</td>
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<td>2007</td>
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<td>2008</td>
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<td>23</td>
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<td>2009</td>
<td>374</td>
<td>114</td>
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<td>2010</td>
<td>406</td>
<td>95</td>
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<tr>
<td>2011</td>
<td>467</td>
<td>140</td>
</tr>
<tr>
<td>2012 (Jan-Mar)</td>
<td>98</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>2407</td>
<td>648</td>
</tr>
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</table>
Kintampo major operations 2004-2012

Year

Major operations

Major types of operations at Kintampo

- C-section: 50%
- Hernia: 34%
- Laparatomy: 12%
- Tubal ligation: 2%
- Hysterectomy: 1%
- Hydrocele: 1%
Major types of operations at Axim

- C-section: 70%
- Hernia: 18%
- Laparotomy: 6%
- Tubal ligation: 2%
- Hysterectomy: 1%
- Hydrocele: 1%
- Amputation: 0%
- POP: 0%
- Orchiopexy: 0%
- Orchiectomy: 0%
Major operations at Kintampo and Axim: comparison

P = .002
Questionnaire

• Job satisfaction?

• What would facilitate your work?

• What would enhance your work experience?
Conclusions

• More major operations at Kintampo

• Axim- minor operations
  – Ekwe

• Why the difference?

• Future directions- in depth analysis, manuscript
Lesson learned

• Every district hospital is different
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- PA Jason Tweneboah
- Dr. Badoe
- Mr. Kenneth
- Dr. Buckle
- Dr. Dyer
- All support staff at both Kintampo and Axim
And of course......
Questions/comments?