Economic Issues in DCP-3 Cancer

Sue Horton

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sehorton@uwaterloo.ca

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Economics of cancer in LMICs: how does this differ from MCH agenda?

- What interventions are cost-effective?
- How can individuals finance their care?
- What will scale-up cost, and how finance it?
- We do not have a large literature on what is cost-effective/feasible in LMICs
- Clear that financing will need to be domestic
- Will take longer with NCDs to see results

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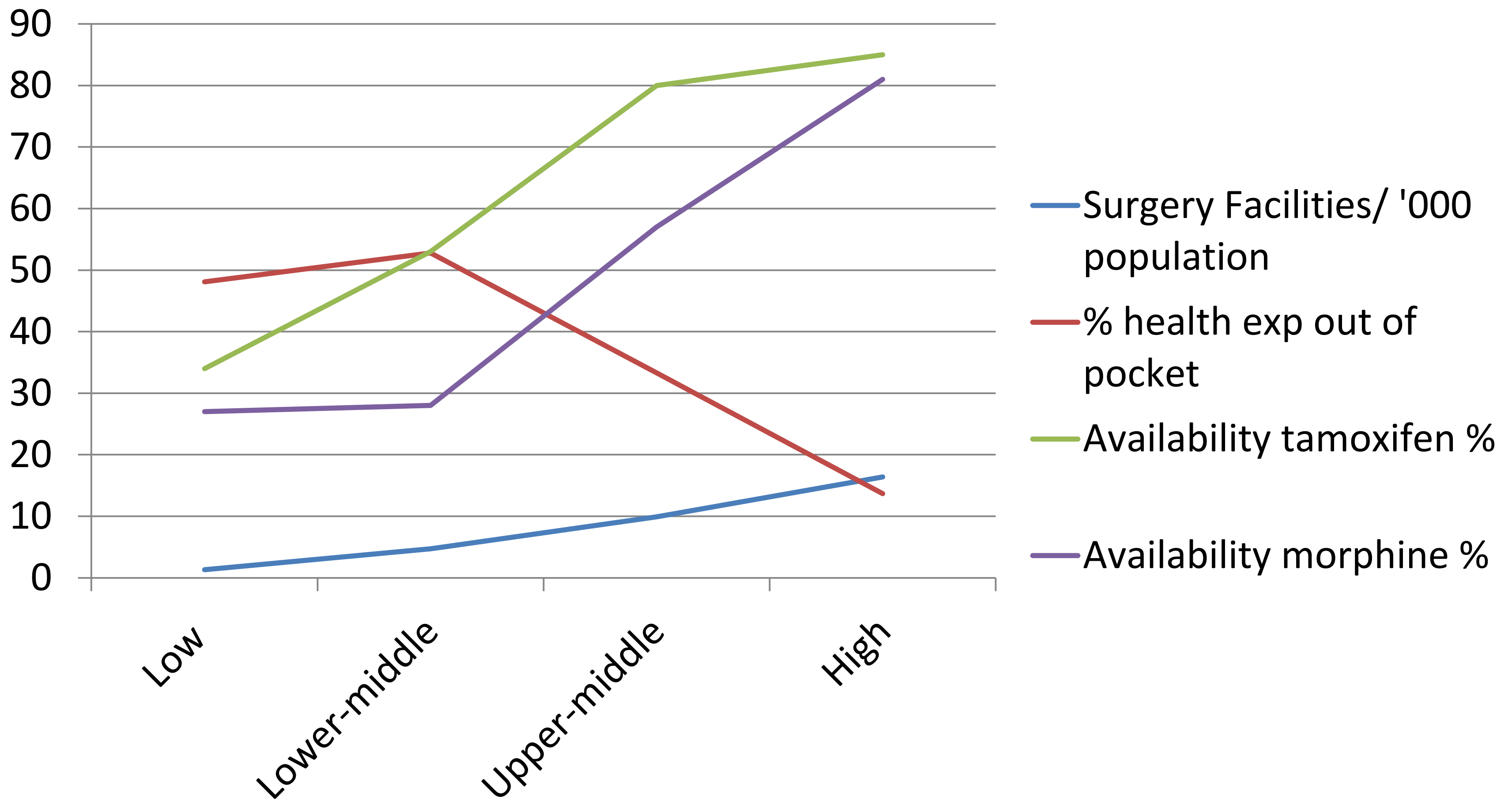
Resource availability for cancer treatment varies with country income



Feasible and cost-effective treatments vary by environment

Environment Income level	Basic Low income	Limited Rural – middle income	Enhanced Urban – middle income	Maximal High income
Surgery	Very scarce	Scarce	Available	Widely avail.
Radiation	Very scarce	Scarce	Available	Widely avail.
Hormonal therapy	Tamoxifen	Tamoxifen	Aromatase inhib; LH-RH agonists	Full range of hormone treatment
Chemotherapy	Barely feasible (labs for bloodwork very scarce)	"Classical" regimes cost-effective	Newer generation drugs cost-effective	Some on-patent drugs may be cost-effective
Screening	Opportunistic feasible	Opportunistic &"campaign-style" feasible	Organized feasible	Organized feasible

Environment categories defined by Anderson et al (Chapter 3, this volume)

Resource-appropriate guidelines

- Concept makes sense to economists: harder to explain to clinicians who want the best possible care for their patients
- But is getting traction: recent Lancet Oncology resource-stratified guidelines on gastric cancer in Asia, colon cancer in Asia, project by ASCO on cervical cancer

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Financing cancer coverage -1

- The growing NCD burden requires accompanying increase in health insurance coverage
- Path to universal healthcare coverage requires
  - Increase in proportion of population covered
  - Increase in services covered
  - Decrease in copayments required (to reduce out-of-pocket expenditures)

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Financing cancer coverage - 2

- In Latin America, governments have moved to add coverage of informal sector of labour market, and coverage of the poor, to coverage of the formal sector: Colombia, Mexico further along; Peru, Dominican Republic following
- Thailand has moved to an integrated scheme: China broadened coverage; India covers poor but not informal sector except few states
- Ghana efforts show some of limits in Africa

Financing cancer care - 3

- Country studies suggest not enough just to extend coverage: need to increase supply too
- Thailand undertook compulsory licencing of 4 key cancer drugs
- Mexico evidence of decrease in abandonment of treatment for pediatric and breast cancer
- Too early to see results on mortality

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Costing the scale-up

- For the infectious disease agenda in LMICs there is voluminous literature on cost-effectiveness, unit costs, and costs of scale-up
- There is the OneHealth tool, which allows costing of same intervention in different countries
- Not true for cancer

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Costing the scale-up 2

- For cancer, literature on cost-effectiveness is quite thin
- Relatively few LMICs have cancer plans; fewer still have financing attached to them
- And there is not yet the international research support
- OneHealth tool covers only one cancer (breast) and not resource-stratified

Conclusions

- More work needed on cost-effectiveness of cancer interventions in LMICs; resource-appropriate guidelines work important
- Need move to universal health coverage to accompany growth of care for NCD’s
- Costing of minimum packages and components is THE next priority – vital for advocacy and planning!

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