

SHOULD THE LACK OF AND THE POOR QUALITY OF INFORMATION ON HIV/AIDS UNIT COSTS RAISE CONCERNS ABOUT RESOURCE ALLOCATION INEFFICIENCY IN SUB SAHARAN AFRICA?

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1



INTRODUCTION

- Sub-Saharan Africa worst hit by HIV/AIDS
- Resources mobilized for the response globally and within countries have increased
- Marked paucity of unit cost data for the region
- At the moment no centralized data base for unit costs for HIV exists at a country level in SSA.
- Some exist at global level (e.g. Futures database). Not comprehensive or up to date
- National Coordinating entities need guidance on resource allocation for HIV/AIDS

METHODS

- Systematic review of the literature in major electronic databases: Google scholar, Scopus and Embase, Medline and the Future's Institute database.
- Search terms employed included:
 - “costs, HIV, Sub-Saharan Africa
 - Cost-effectiveness, HIV/AIDS, Sub-Saharan Africa
 - Costs, AIDS, Sub-Saharan Africa
- 2100 articles were retrieved. Only 69 were eligible for the systematic review.
- The checklist by Drummond et al was used to assess the approaches to costing in the studies.

Intervention	Number of articles	Country
Voluntary Counseling and Testing	8	Namibia, SA, Kenya, TZ, Uganda
PMTCT	17	Uganda, South Africa, Malawi, Kenya, Tanzania,
IEC/BCC	1	Uganda
STD Prevention	2	Tanzania, Uganda
Condom Distribution	1	Tanzania, Uganda, South Africa
Blood Safety	4	Zimbabwe, Ghana, Tanzania, Zambia
Male Circumcision	9	South Africa, Botswana. Uganda, Malawi, Namibia, TZ, Kenya, Rwanda, Mozambique
HAART	21	South Africa, Uganda, Zimbabwe
Total	69	

CHECKLIST FOR COST ANALYSIS

- What is the viewpoint of the study?
- Is the comparison restricted to two or more programmes?
- **Was there evidence that the programs effectiveness had been determined?**
- Were all the relevant costs identified?
- Were all the relevant costs measured accurately in physical units?
- Were costs valued credibly?
- Were costs adjusted for differential timing?
- Was an incremental analysis of costs of alternatives performed?
- Was a sensitivity analysis done?
- **Did the presentation and discussion of results include all issues of concern to users?**

FINDINGS OF THE REVIEW

- **Perspective of the study:** Varies greatly. The majority of studies adopted the providers perspective. While 75% adopted the programme perspective, 10% adopted the Public Health perspective and 15% did not specify the perspective
- **Identification of resources:** There is variation in the resources identified and costed even for the same intervention. Approximately 35% did not include shared costs.
- Variation in the **reporting of costs.** 80% reports costs in US Dollars while other report in Local currency and 5% in International Dollars.
- The outcome measure varied greatly in the studies.

FINDINGS CONTINUED

- Variation in the **discount rate** chosen. In 70%, the discount rate is 3%. However, in 15%, discount rate of 5% is used. Other studies did not report discount rates
- All studies conducted **Sensitivity analysis** although they vary in the manner in which it is done.
 - One-way SA- 100%
 - N-way SA- 85%
 - Univariate & Multivariate-65%
 - Scenario-based- 40%
 - Probabilistic SA- < 10%

COMPREHENSIVENESS OF THE COSTING

- Not all possible activities or interventions have been costed. This is in special reference to the structural interventions like policies and laws that facilitate HIV prevention and behavioral interventions such as abstinence and being faithful.
- Paucity of unit cost data in the published literature for antiretroviral therapy in SSA

Intervention	Country	Unit cost	Outcome measure
HAART	<ul style="list-style-type: none"> • South Africa 	<ul style="list-style-type: none"> • \$19.33 • \$18.92 • \$293.7 • \$131.02 • \$621.54 	<ul style="list-style-type: none"> • Cost/visit for ART • Cost/visit for non-ART • Cost/patient for inpatient-tertiary • Cost/inpatient-secondary • Cost/patient-TB
STD Prevention	SA (CSW)	\$77, 135, 44,102.	Cost/woman seen, cost/woman seen repeatedly, cost per visit, cost per syndrome

Intervention	Country	Unit cost	Outcome measure
Condom Distribution (Female)	<ul style="list-style-type: none"> • South Africa, • SSA • Kenya • SSA 	<ul style="list-style-type: none"> • 985/HIA • \$217.76/woman reached • \$0.18/client (2000) • \$237.3/woman • \$0.145/condom (2001)* 	<ul style="list-style-type: none"> • Cost/HIA • Cost/woman reached • Cost/contact • Cost/condom distributed
Male Circumcision	<ul style="list-style-type: none"> • Botswana, • Tanzania • South Africa • ESA, Zimbabwe 	<ul style="list-style-type: none"> • \$48, 38, 60, 48. (2009 Botswana) • \$38.33-\$46.2/MC(2010) • \$54.72 (2006) • \$65-90/VMMC (2011) 	<ul style="list-style-type: none"> • Cost per circumcision (Adult & neonate Cost/MC • Cost/HIA • Cost/MC (Publicity costs, no training) • Cost/VMMC

Intervention	Country	Unit cost	Outcome measure
Voluntary Counseling and Testing	SA, SSA, Namibia, SA	<ul style="list-style-type: none"> • \$67/HIA in STI clinics, \$112/HIA in community • 1,315/HIA in generalized CEA (PHC) \$101.58 per client • \$60.59/per person tested(Mobile), \$58.1 per person tested (fixed) • R14-83/ patient counseled (1997) 	<ul style="list-style-type: none"> • Cost per HIV infection averted • Cost per client • Cost/per person tested • Cost/ patient post-test counseled
PMTCT	SA, SA, Botswana, Uganda, Zambia, Zimbabwe, TZ, Rwanda, Kenya, Ivory Coast	<ul style="list-style-type: none"> • 5806/HIA (ZDV alone) • 5561/HIA(Enhanced ZDV) • 2492/HIA (ZDV+3TC) • Varied widely from \$1808 in Botswana to \$9528 in IC (2000) 	Cost/HIA

RECOMMENDATIONS

- Need to centralize information on unit costs for HIV/AIDS or to improve on existing ones.
- Need to agree on minimum standards for costing approach for HIV/AIDS for SSA countries.
- Need to estimate costs for behavioral and structural interventions like legislative interventions as well as ART.

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**THANK YOU FOR YOUR
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ANY QUESTIONS?