

Can countries of the WHO African Region wean themselves off donor funding for health?

Joses Muthuri Kirigia^a & Alimata J Diarra-Nama^a

Abstract More than 20% of total health expenditure in 48% of the 46 countries in the WHO African Region is provided by external sources. Issues surrounding aid effectiveness suggest that these countries ought to implement strategies for weaning off aid dependency. This paper broaches the following question: what are some of the strategies that countries of the region can employ to wean off donor funding for health? Five strategies are discussed: reduction in economic inefficiencies; reprioritizing public expenditures; raising additional tax revenues; increased private sector involvement in health development; and fighting corruption.

Bulletin of the World Health Organization 2008;86:889–895.

La traducción en francés de ce résumé figure à la fin de l'article. Al final del artículo se facilita una traducción al español. الترجمة العربية لهذه الخلاصة في نهاية النص الكامل لهذه المقالة.

Introduction

According to the recommendation by the WHO Commission on Macroeconomics and Health that countries need to spend US\$ 34 per person per year to provide a set of essential interventions,¹ the WHO African Region with a population of about 722 million requires about US\$ 24.5 billion per year. The Commission's estimate did not include the cost of strengthening national health systems. In 2004, the total health expenditure in the WHO African Region was about US\$ 35.53 billion, of which approximately US\$ 2.23 billion (6.25%) was from external sources. The magnitude of external funding on health as a percentage of total health expenditure varies widely between countries. Eighteen countries received < 11% of their total health expenditure from external sources; 9 countries received 11–20%; 7 countries received 21–30%; 6 countries received 31–40%; and the remaining 6 countries received 41–60% of their total health expenditure from external sources.²

Given existing issues surrounding aid effectiveness, countries of the region ought to implement strategies for weaning donor funding for health.³ This

paper attempts to discuss the following question: what are some of the strategies that countries of the WHO African Region can employ to wean themselves off donor funding for health?

Possible strategies

Reduction in economic inefficiencies

Productivity within the health system is a measure of the physical output produced from the use of a given quantity of inputs. Economic efficiency is about producing the maximum health services possible from an available quantity of health system inputs, using cost-minimizing production techniques. The studies reviewed in Table 1 show significant scope for increasing provision of health services using the current levels of resources allocated to hospitals and health centres. This could entail either leveraging of health promotion strategies to create demand of underutilized primary health care or transferring specific inputs from overresourced to underresourced health facilities.⁴

Other inefficiencies relate to misallocation of resources by regions (e.g. choice of health facility sites based on political criteria rather than need), lev-

els of care (investment of the majority of resources in tertiary and secondary hospitals instead of in cost-effective primary health care) and channelling of the majority of donor funds through vertical programmes instead of through the national health system.^{15,16} Capital investment decisions and choice of public health interventions ought to be based on cost-effectiveness and cost-benefit analysis criteria. Countries should also institutionalize economic efficiency monitoring within national health management information systems with a view to implementing appropriate policy interventions to reduce wastage of scarce health systems inputs.¹⁰

Reprioritizing public expenditure

Countries might be able to create resources for health development through reductions in unproductive expenditure in, for example, the military.¹⁷ The potential military expenditure savings were calculated as:

Potential savings = country's actual per capita military expenditure – the African region per capita military expenditure × the national population for the country

^a Division of Health Systems and Services Development, World Health Organization Regional Office for Africa, Brazzaville, the Congo.

Correspondence to Joses Muthuri Kirigia (e-mail: kirigiaj@afro.who.int).

doi:10.2471/BLT.08.054932

(Submitted: 22 May 2008 – Revised version received: 28 July 2008 – Accepted: 31 July 2008)

Table 1. Review of health facility efficiency studies in the WHO African Region

Country and DMU	No. of DMUs with technical inefficiency	Average technical efficiency scores among inefficient DMUs (%)	Scope for increasing health service output (%)
Angola			
28 municipal hospitals in 2000 ⁴	17	66.2	33.8
28 municipal hospitals in 2001 ⁴	16	65.8	34.2
28 municipal hospitals in 2002 ⁴	18	67.5	32.5
Ghana			
17 district hospitals ⁵	8	61	39
17 health centres ⁵	3	49	51
Kenya			
54 public hospitals ⁶	14	84	16
32 public health centres ⁷	18	65	35
Namibia			
20 public hospitals in 1997/1998 ⁸	13	56	44
24 public hospitals in 1998/1999 ⁸	16	64	36
26 public hospitals in 1999/2000 ⁸	23	59	41
26 public hospitals in 2000/2001 ⁸	21	60	40
Seychelles			
17 health centres in 2001 ⁹	7	95.8	4.2
17 health centres in 2002 ⁹	9	93.2	6.8
17 health centres in 2003 ⁹	8	94.0	6
17 health centres in 2004 ⁹	7	96.4	3.6
Sierra Leone			
37 peripheral health units ¹⁰	22	63	37
South Africa			
55 hospitals ¹¹	22	76	24
155 public clinics ¹²	108	61	39
Zambia			
30 hospitals ¹³	18	45	55
40 health centres ¹⁴	33	54	46

DMU, decision-making unit.

Military expenditure data for 32 countries in the African region (for which data were available) were obtained from the World Factbook published by the Central Intelligence Agency (CIA), United States of America.¹⁸

The per capita military expenditure was US\$ 1–3.99 in 7 countries; US\$ 4–6.99 in 10 countries; US\$ 7–10 in 4 countries; US\$ 11–16 in 3 countries; and > US\$ 16 in 8 countries. The average military expenditure per person among the 32 African countries was US\$ 16.02. Arguably the 8 (25%) countries that have an above-average per capita military expenditure have a scope for reducing military expenditures for use in health development.¹⁷ This could entail reducing the numbers of new recruits into the military, freezing senior military positions when occupants retire (or die before retirement) and refraining from acquiring

expensive military aircrafts, vehicles and equipment. Such a reduction should be planned and done over a realistic period of time to avoid security problems.

Raising additional revenue

According to Heller¹⁷, “for low income countries, raising the tax share to at least 15% of gross domestic product (GDP) should be seen as a minimum objective”. The average current tax level in Africa is 20.2% of GDP compared to 38% of GDP in industrialized countries.¹⁹ Of 39 WHO African Region countries whose data were available, current tax level was < 15% of GDP in 13 countries; 15–20% in 12 countries; 21–30% in 8 countries; and > 30% in 6 countries. Therefore, the 13 (33%) countries whose tax share of GDP is < 15% have a scope to increase it to 15%. Raising additional tax revenues requires “enhanced autonomy of tax

administrations, capacity-building of tax administration, performance-based infrastructures, simplification of laws and procedures, universal self-assessment in all taxes, sharing information across inspectors, independent internal controls, risk management principles, audit-based taxpayer controls, improved dispute resolution mechanisms, and professional and efficient taxpayer services”.¹⁹

Increased private sector involvement

The private health sector plays a significant role in health service provision, financing (about half of total health expenditure), production of health inputs (medicines, health technologies, human resources), construction of health infrastructure and provision of water and sanitation. Countries can boost private sector contributions by

Joses Muthuri Kirigia & Alimata J Diarra-Nama

developing enabling policy and regulatory frameworks, developing and enforcing quality standards, expanding risk pooling arrangements, contracting the private sector to deliver specific services, and improving the ability of the local financial institutions to support health service enterprises.²⁰

Fighting corruption

Corruption is misuse of entrusted power for private (pecuniary or monetary) gain. It reduces the resources available for health development, lowers the quality of services, compromises effective coverage of health services and inflates the unit costs of services provided.²¹ Corruption in financial resource management can be attenuated by implementing legal and institutional frameworks; avoiding off-budget activities; developing sound budget and expenditure systems; building budget literacy among parliamentarians, media and civil society; making budgetary information available for public scrutiny; transferring funds directly from ministries of finance to health facilities (preceded by development of requisite planning, budgeting, monitoring and evaluation capacities); institutional-

izing national health expenditure tracking; strengthening the effectiveness of audit institutions; encouraging public participation in priority-setting, resource allocation, execution, performance monitoring and audit processes; and channelling all aid flows for health development through general government budget support.^{20,22} Corruption in management of medical supplies can be reduced by developing transparent regulatory policies for medicines, procedures and criteria for drug licensing, accreditation and approvals; adopting the WHO Essential Medicines List; defining clear and transparent procurement rules and guidelines for competitive tendering; establishing inventory control systems and security at warehouses; and banning practices of gifts and sponsorship in the marketing of medicines.^{20,22}

Corruption in health worker/patient interaction can be improved by implementing a patients' rights charter and improving access to information; promoting contractual relationships between government and health workers; introducing official copayments; improving hierarchical accountability and human resource management;

adopting codes of ethics regulating the medical profession; and involving the community in health services management through local health boards or committees.^{20,22}

Conclusion

Armed with a clear vision and backed by effective programmes for improving economic efficiency of public and private expenditure; identifying and pruning unproductive public expenditures; strengthening of tax administration systems; creating an environment for enabling private health sector growth; and boosting health development governance, countries of the African region have a high probability of weaning off donor funding for health in this century. Pursuit of such a noble vision should be supported by an enabling macroeconomic and political (i.e. internally secure) environment. ■

Acknowledgements

We thank Jehovah Nissi for his inspiration and the anonymous peer reviewers for their suggestions.

Competing interests: None declared.

Résumé

Les pays de la Région africaine de l'OMS peuvent-ils se passer des apports des donateurs pour financer la santé ?

Plus de 20 % des dépenses totales de santé de 48 % des 46 pays de la Région africaine de l'OMS sont financés par des sources externes. La problématique liée à l'efficacité de l'aide internationale amène à penser que ces pays devraient mettre en œuvre des stratégies pour s'affranchir de leur dépendance à l'égard de cette aide. L'article examine quelles stratégies pourraient être appliquées par les pays de la Région pour se

passer des donateurs dans le financement de la santé. Cinq de ces stratégies sont analysées : amélioration des insuffisances sur le plan économique, révision des priorités des dépenses de santé, collecte de revenus fiscaux supplémentaires, implication accrue du secteur privé dans le développement de la santé et lutte contre la corruption.

Resumen

¿Pueden los países de la Región de África de la OMS dejar de depender de los donantes para financiar la salud?

Más del 20% del gasto sanitario total del 48% de los 46 países de la Región de África de la OMS se financia a partir de fuentes externas. Diversos aspectos relacionados con la eficacia de la ayuda parecen indicar que estos países deberían aplicar estrategias que les permitieran acabar con esa dependencia de la ayuda externa. En este artículo se plantea la siguiente cuestión: ¿qué

estrategias podrían emplear los países de la región a fin de dejar de depender de los donantes para financiar la salud? Se examinan cinco estrategias: reducción de las ineficiencias económicas; repriorización del gasto público; aumento de la recaudación de ingresos fiscales; aumento de la participación del sector privado en el desarrollo sanitario; y lucha contra la corrupción.

ملخص

هل تستطيع بلدان إقليم منظمة الصحة العالمية الإفريقي فطم نفسها عن تمويل المانحين للخدمات الصحية فيها؟

التي يمكن لبلدان الإقليم توظيفها من أجل فطم نفسها عن تمويل المانحين للخدمات الصحية فيها؟ إن هناك خمس استراتيجيات مطروحة للمناقشة هي: عدم الكفاءة الاقتصادية، وإعادة ترتيب أولويات الإنفاق العام، ورفع إيرادات الضرائب الإضافية، وزيادة إشراك القطاع الخاص في التنمية الصحية، ومحاربة الفساد.

إن أكثر من 20% من إجمالي النفقات الصحية في 48% من البلدان الستة والأربعين الأعضاء في إقليم منظمة الصحة العالمية الأفريقي، تتوفر من مصادر خارجية. وتشير القضايا المحيطة بفعالية المعونات إلى أنه ينبغي لهذه البلدان أن تنفذ استراتيجيات تهدف إلى أن تفتطم نفسها عن الاعتماد على المعونة. وتطرح هذه الورقة السؤال الآتي: ما هي هذه الاستراتيجيات

References

1. Commission on Macroeconomics and Health. *Macroeconomics and health: investing in health for economic development*. Geneva: WHO; 2001.
2. WHO Statistical Information System. Geneva: WHO; 2008. Available from: <http://www.who.int/whosis/en/index.html> [accessed on 30 September 2008].
3. *Paris declaration on aid effectiveness: ownership, harmonization, alignment, results and mutual accountability*. Paris: Organisation for Economic Co-operation and Development; 2005.
4. Kirigia JM, Emrouznejad A, Cassoma B, Asbu EZ, Barry S. A performance assessment method for hospitals: the case of municipal hospitals in Angola. *Journal of Medical Systems* 2008.
5. Osei D, George M, d'Almeida S, Kirigia JM, Mensah AO, Kainyu LH. Technical efficiency of public district hospitals and health centres in Ghana: a pilot study. *Cost Eff Resour Alloc* 2005;3:9. PMID:16188021 doi:10.1186/1478-7547-3-9
6. Kirigia JM, Emrouznejad A, Sambo LG. Measurement of technical efficiency of public hospitals in Kenya: using data envelopment analysis. *J Med Syst* 2002;26:39-45. PMID:11777310 doi:10.1023/A:1013090804067
7. Kirigia JM, Emrouznejad A, Sambo LG, Munguti N, Liambila W. Using Data Envelopment Analysis to measure the technical efficiency of public health centers in Kenya. *J Med Syst* 2004;28:155-66. PMID:15195846 doi:10.1023/B:JOMS.0000023298.31972.c9
8. Zere A, Mbeeli T, Shangula K, Mandhlate C, Mutirua K, Tjivambi B, et al. Technical efficiency of district hospitals: evidence from Namibia using Data Envelopment Analysis. *Cost Eff Resour Alloc* 2006;4:5. PMID:16566818 doi:10.1186/1478-7547-4-5
9. Kirigia JM, Emrouznejad A, Vaz RG, Bastiene H, Padayachy J. A comparative assessment of performance and productivity of health centers in Seychelles. *Int J Prod Perform Manag* 2008;57:72-92. doi:10.1108/17410400810841245
10. Renner A, Kirigia JM, Zere AE, Barry SP, Kirigia DG, Kamara C, Muthuri HK. Technical efficiency of peripheral health units in Pujehun district of Sierra Leone: a DEA application. *BMC Health Serv Res* 2005;5:77. PMID:16354299 doi:10.1186/1472-6963-5-77
11. Kirigia JM, Lambo E, Sambo LG. Are public hospitals in Kwazulu-Natal province of South Africa technically efficient? *Afr J Health Sci* 2000;7:25-32. PMID:17650022
12. Kirigia JM, Sambo LG, Scheel H. Technical efficiency of public clinics in Kwazulu-Natal province of South Africa. *East Afr Med J* 2001;78:S1-13. PMID:12002061
13. Masiye F. Investigating health system performance: an application of data envelopment analysis to Zambia hospitals. *BMC Health Serv Res* 2007;7:58. PMID:17459153 doi:10.1186/1472-6963-7-58
14. Masiye F, Kirigia JM, Emrouznejad A, Sambo LG, Mounkaila A, Chimfwembe D, et al. Efficient management of health centres human resources in Zambia. *J Med Syst* 2006;30:473-81. PMID:17233160 doi:10.1007/s10916-006-9032-1
15. Gottret P, Schieber G. *Health financing revisited: a practitioner's guide*. Washington, DC: The World Bank; 2006.
16. *Health financing: a strategy for the African Region*. Brazzaville: WHO Regional Office for Africa; 2006.
17. Heller P. *Understanding fiscal space* [policy discussion paper PDP/05/4]. Washington, DC: International Monetary Fund; 2006.
18. *The world factbook*. Washington, DC: Central Intelligence Agency; 2008. Available from: <http://www.cia.gov/library/publications/the-world-factbook/> [accessed on 30 September 2008].
19. Ruhashyankiko J-F, Stern RE. *Incentive structure of tax systems in Africa*. Washington, DC: International Monetary Fund; 2006.
20. International Finance Corporation. *The business of health in Africa: partnering with the private sector to improve people's lives*. Washington, DC: The World Bank; 2008.
21. Transparency International. *Global corruption report 2006: corruption and health*. London: Pluto Press; 2006.
22. Vian T. Review of corruption in the health sector: theory, methods and interventions. *Health Policy Plan* 2008;23:83-94. PMID:18281310 doi:10.1093/heapol/czm048