

# Public spending on health care in Africa: do the poor benefit?\*

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Health care is a basic service essential in any effort to combat poverty, and is often subsidized with public funds to help achieve that aim. This paper examines public spending on curative health care in several African countries and finds that this spending favours mostly the better-off rather than the poor. It concludes that this targeting problem cannot be solved simply by adjusting the subsidy allocations. The constraints that prevent the poor from taking advantage of these services must also be addressed if the public subsidies are to be effective in reaching the poor.

**Keywords:** Africa; health expenditures; health services accessibility; poverty; social justice; socioeconomic factors.

*Voir page 72 le résumé en français. En la pagina 73 figura un resumen en español.*

## Introduction

Public subsidies for social services such as education and health care rest on two basic policy objectives — efficiency and equity. Efficiency gains can be achieved when the subsidies produce external benefits or correct for a market failure. Equity is also an important objective of public spending. Health care, in particular, is understood to be a basic service that is essential in any fight against poverty. The World Bank's strategy for poverty reduction, for example, combines broad-based growth with human capital development (1). For this strategy, public subsidies of investments that enhance human capital must benefit the poor.

To what extent has government health spending in Africa been effective in reaching the poor? To answer that question, this article reviews the benefit incidence of government health spending. It finds that government subsidies directed towards curative health care are poorly targeted to poor households, and indeed favour those who are better off. Improving targeting to the poor involves not simply rearranging the public subsidies, but also addressing the constraints that prevent the poor from accessing these services. The article examines these issues by

reviewing the evidence on the benefit incidence of health spending in seven African countries.

## What is benefit incidence?

Measuring the benefits to individuals of publicly provided goods is a matter of long-standing concern in economics. For market-based goods and services, the prices consumers pay can be taken as reflecting underlying values, and can be used to yield measures of welfare that can be compared across individuals and over time. But when governments subsidize the provision of private goods (such as health care, education, and many infrastructure services), the supply is usually rationed, and the price paid (if any) does not necessarily reflect the marginal value to individual consumers.

Two broad approaches have been pursued to measure the value to the beneficiaries of government subsidized goods and services. The first, based on the Aaron & McGuire methodology (2), emphasizes the individual's own valuation of the good (i.e., the demand, or virtual price). The difficulties inherent in estimating these prices led to the development of a less demanding approach (reviewed by de Wulf (3) and Cornes (4) that values publicly provided goods at their marginal cost (5). This second approach is called benefit incidence. It combines the cost of providing public services with information on their use to show how the benefits of government spending are distributed across the population (6–8). It should be emphasized at the start that this approach does not deal with the therapeutic value of health services, and how they affect the health status of different groups in the population. It involves estimating the *monetary value* of services, and how that monetary value is distributed across the population. Until recently no such studies had been undertaken in Africa. This article fills that empirical gap.

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A benefit incidence analysis involves three steps.

- Estimating the unit cost or unit subsidy (in current expenditures)<sup>a</sup> of providing a service. For health care, this typically means estimating the cost of a health care consultation or visit.
- Imputing the unit subsidy to households or individuals who are identified (usually from household surveys) as users of the service. Individuals who use a subsidized public service in effect gain an in-kind transfer. Benefit incidence measures the distribution of this transfer across the population.
- Aggregating individuals (or households) into subgroups of the population to compare distribution of the subsidy among different groups. The most common grouping is by income or a related measure of the welfare of the individual. The studies reported here group individuals according to the total expenditure per capita of the households to which they belong.<sup>b</sup>

Consider the benefit incidence of public spending on curative health care. This is given by:

$$X_j \equiv \sum_{i=1}^3 H_{ij} \frac{S_i}{H_i} \equiv \sum_{i=1}^3 \frac{H_{ij}}{H_i} S_i, \quad \text{eq. (1)}$$

where  $X_j$  is the value of the total health subsidy imputed to group  $j$ ,  $H_{ij}$  represents the number of health visits of group  $j$  to health facilities at level  $i$  ( $i$  representing, for example, primary, secondary and tertiary levels of health care),  $H_i$  is the total number of such visits (across all groups), and  $S_i$  is government *net* spending on health care at level  $i$  (with fees and other cost recovery netted out). Note that  $S_i/H_i$  is the unit subsidy of funding a health consultation at level  $i$ .<sup>c</sup> The *share* of the total health subsidy ( $S$ ) accruing to the group is given by:

$$x_j \equiv \sum_{i=1}^3 \frac{H_{ij}}{H_i} \left( \frac{S_i}{S} \right) \equiv \sum_{i=1}^3 b_{ij} s_i. \quad \text{eq. (2)}$$

Clearly, this share (and indeed overall inequality in benefit incidence) is determined by two 'proximate' factors: the share of the group in total health consultations at each level of care ( $b_{ij}$ ); and the share of each level of health care in total health spending ( $s_i$ ). The values  $b_{ij}$  reflect household health care decisions, whereas the values  $s_i$  reflect government spending allocations.

## Health spending in Africa

Recent improvements in household survey data that provide information on the welfare of households and their use of public services offer an opportunity to estimate the distribution of government subsidies in the social sectors. These data include information on household responses to an occurrence of illness or injury, and therefore reflect the use of *curative* services. Government spending on other health interventions (such as preventive services and public health programmes) is not dealt with here. This section reports estimates of the benefit incidence of government health spending in Côte d'Ivoire, Ghana, Guinea, Kenya, Madagascar, South Africa, and the United Republic of Tanzania.

## Health care delivery systems

The public health systems in the above seven mentioned countries are very similar (with the exception of South Africa, which has a much more developed private sector). Typically, public facilities provide more than two-thirds of the medical care in these countries. Private non-profit (mostly charitable) organizations provide the remaining one-third. In the United Republic of Tanzania, for example, private non-profit hospitals account for about half of all hospitals and about 3% of all health centres. Private for-profit medical care is increasing in most of the countries, but from a low base.

Table 1 shows how households respond to an injury or illness.<sup>d</sup> These responses reflect the availability, cost, and quality of health services, as well as the circumstances of the individual households. The results are not strictly comparable across countries because the design of the survey instruments is not standardized.<sup>e</sup> Moreover, the results

<sup>a</sup> Current expenditures are used because they benefit current beneficiaries. Capital spending may well have a quite different incidence, but it benefits future beneficiaries.

<sup>b</sup> This welfare measure ( $\mathcal{G}$ ) is now an established one for poverty analysis. Usually, household expenditures include imputed values for own-produced consumption and take into account regional variations in prices. In most cases, the welfare measure normalizes household expenditure on household size (the exception here being the study of South Africa, which uses total household expenditure per adult equivalent as its welfare measure). As shown here, the results are sensitive to the welfare measure used. Our reliance on per capita expenditure comes from the use of this measure in the studies that we draw on. But for future work, benefit incidence should explore ranking households by other measures. The effects of different assumptions about economies of scale in household consumption, for example, should be investigated. Given the effects of random variations in observed expenditures, an alternative approach would be to use instrumented or predicted values of the welfare measure ( $\mathcal{I}$ ).

<sup>c</sup> Eq. (1) defines only one unit subsidy for each level of service. In some of the applications that follow, regional and other (ethnic) variations in subsidies are also taken into account. Eq. (1) would then become:

$$X_j \equiv \sum_{k=1}^n \sum_{i=1}^3 \frac{E_{ijk}}{E_i} \left( \frac{S_{ik}}{S} \right) \equiv \sum_{k=1}^n \sum_{i=1}^3 e_{ijk} s_{ik}$$

where the  $k$  subscript denotes the region specified in the unit cost estimate, there being  $n$  regions distinguished. For simplicity we drop the  $k$  subscript throughout, although in some countries this distinction is important.

<sup>d</sup> Country coverage varies in the tables depending on the availability of data.

<sup>e</sup> These data are not comparable across countries. The Guinea estimate, for example, assumes that all private treatment provided at the home of the respondent is traditional (which is not true of the other countries). There is some suggestion in these data that respondents report visits to private pharmacists and traditional caregivers as "self treatment", which would explain the apparently low use of traditional care. Such underreporting of traditional care would leave reported use of modern health providers (and the analysis that follows) unaffected. There may well be indirect effects of government health spending that affect traditional services, but without strong empirical evidence about these effects in the studies reviewed here, we assume that such care is unaffected by public subsidies.

Table 1. Percentage ill and treatment response, by quintile, in selected African countries

Country	% ill during previous 4 weeks	Of those ill, % seeking			
		No care	Modern public care	Modern private care	Traditional care
Côte d'Ivoire (1995) <sup>a</sup>					
Poorest 20%	30	73	26	1	NA <sup>b</sup>
Richest 20%	50	35	55	10	NA
Ghana (1992) <sup>a</sup>					
Poorest 20%	33	59	23	14	4
Richest 20%	58	43	28	24	5
Guinea (1994)					
Poorest 20%	24	60	15	0	26 <sup>c</sup>
Richest 20%	32	31	52	6	10 <sup>c</sup>
Madagascar (1993) <sup>a</sup>					
Poorest 20%	20	72	20	3	5
Richest 20%	34	52	29	16	3
South Africa (1994) <sup>a</sup>					
Poorest 20%	12	25	46	23	6 <sup>d</sup>
Richest 20%	26	14	9	74	3 <sup>d</sup>
United Republic of Tanzania (1993–94)					
Poorest 20%	12	42	37	17	3
Richest 20%	22	27	32	39	1

<sup>a</sup> The reference period was 2 weeks, so proportion was multiplied by 2 to make estimates approximately comparable.

<sup>b</sup> NA = not available.

<sup>c</sup> Private care received at home.

<sup>d</sup> Includes all other providers.

suggest a bias: poorer households are less inclined to report illness than are their better-off counterparts. Perhaps that is because the poor accept illness as a normal feature of life and do not consider it an event worth reporting. Lower reporting could also occur because poorly educated respondents are less likely to recognize untreated illnesses, a problem that is discussed by Chernikovskiy & Meesook (10) and van de Walle (11). Indeed, the very concept of an illness may differ widely across communities. Some symptoms (such as loss of consciousness due to malaria) may be perceived as spiritual imbalance rather than ill-health.

Evidence from these countries shows that patterns of treatment are strikingly different across household groups.

- The poor are more inclined to treat themselves than are the rich, and they are less likely to seek private modern care.
- The richest groups rely on publicly provided care, particularly in Côte d'Ivoire and Guinea. Only in South Africa is there evidence of the richest groups opting out of the state system in favour of private care.
- The poor rely mainly on the public system, but the private sector is important for both the poor and the non-poor in Ghana, South Africa, and the United Republic of Tanzania.

- Interestingly, with the exception of Guinea, there is little reliance on traditional health providers.

These countries have three-tiered public health systems, with basic clinics and dispensaries at the first level, district level hospitals at the secondary level, and referral and speciality hospitals at the tertiary level. Resources (and hence services) are generally concentrated at the tertiary level. Typically, less than 25% of recurrent expenditures accrue to the primary level. The public systems are traditionally subsidized from general revenues, although recently each country has implemented cost recovery at most public health care facilities to help finance services and to improve quality. In almost all countries, health care personnel (particularly physicians) are concentrated in urban areas, where they provide tertiary level care, and are comparatively scarce in rural areas.

Although resources and services are heavily focused on specialized health care, the main causes of illness and death in all seven countries are preventable and easily treated diseases, such as acute respiratory illness, diarrhoea, and malaria. In Madagascar it is estimated that 90% of illnesses could be prevented or treated at the primary level, provided the services are of good quality and accessible to the majority of the population (12). In an effort to provide better primary and preventive care, most of these countries have begun to decentralize public health care systems. Several have recently modified the structure of their health care systems, but few have actually made major resource reallocations. In Côte d'Ivoire the share of total recurrent expenditures devoted to primary care was scheduled to increase from 35% in 1991 to 42% in 1995. Instead, the share declined in 1995 to 32%.

### Unit subsidies in health

Estimates of the unit subsidies for public health care in six African countries are given in Table 2. The unit subsidy represents the net current cost to the government of an individual visit to a health facility. It is calculated as total recurrent spending on facilities, less any revenue from cost recovery (the amount that is returned to the treasury), normalized by the number of visits. Typically, this figure is obtained from government accounts. In some cases, visits are estimated from the household survey used to identify users of the facility; in others, health ministry data are used. The subsidy for a visit to a health centre or primary health clinic is generally less costly to the government than a visit to a hospital, and outpatient visits are substantially less costly than inpatient visits. In Ghana an outpatient visit is one tenth the cost of an inpatient visit, and in Guinea the ratio is 1:7.

Unit cost data are limited in several respects. First, only in two cases — Ghana and South Africa — do the data refer to actual recurrent spending on health facilities; in the other countries, they are based on budgeted expenditures, which may differ sig-

nificantly from outcomes. Second, there is little disaggregation by type of facility, type of consultation, or region of the country, masking variations in the costs of consultation. The unit costs were generally averaged into two groups — visits to health centres and visits to hospitals. No distinction was made between different types of hospital care (such as secondary and tertiary hospitals). And making a distinction between outpatient and inpatient visits was feasible in only two countries, Ghana and Guinea. Further, a lack of data on regional health expenditures means that unit subsidies were generally calculated at the national level. In Ghana and Madagascar, however, where regional data were available, differences among regions were significant. For example, spending per visit to a primary health care facility in Accra was almost six times that for other areas of Ghana. Such inequalities may also hold in other countries but were masked in the aggregate data to hand. It should be emphasized that the data for South Africa are for 1992–93, to correspond to the household survey year. A great deal has changed since then, with the election of the Government of National Unity, and these changes will undoubtedly influence the benefit incidence of health spending.

### Who benefits from health subsidies?

By combining the unit costs of health care delivery with the use of publicly funded health facilities, we can estimate the benefit incidence of government spending on curative health care. For convenience, we report here the benefit incidence of spending to the poorest quintile (that is, the poorest 20% of the population, ranked by expenditure per capita) and the richest quintile (Table 3).

Two clear messages emerge. First, curative health spending in Africa is not well targeted to the poorest. Typically the share of the subsidy to the poorest quintile was significantly less than that to the richest 20%. The inequality was greater in some countries (notably Côte d'Ivoire, Ghana, Guinea, and Madagascar) than in others, but overall, the poorest 20% of the population received less than 20% of the subsidy. Moreover, the share received by the richest quintile was far in excess of 20% (except in South Africa, where the richer households rely on private care; see Table 1). The second message is that health spending is reasonably progressive; the subsidy to the poorest quintile amounts to a higher share of that group's total household expenditures than did the subsidy to the richest quintile (see Table 3). This progressiveness was particularly striking in South Africa but was also true of the other countries. This finding suggests that if the government gave all households an annual income transfer, rather than subsidized health care, income expenditure distribution would improve, other things being constant.<sup>f</sup>

<sup>f</sup> Our concern here is with the distribution effects of government spending on curative care, and we ignore the revenue side of the fiscal accounts. It is likely that the top quintile contributes disproportionately to the revenue account.

Table 2. Unit health subsidies by facility, in selected African countries

Country	Currency	Health centre	Hospital		All
			Outpatient	Inpatient	
Côte d'Ivoire (1995)	CFA fr	1252			1787 <sup>a</sup>
Ghana (1992) Accra	cedi	6489	4044	49 553	
Non-Accra	cedi	1129	1275	14 427	
Guinea (1994)	GS	902	1321	7926	
Kenya (1992–93) <sup>b</sup>	K Sh	15		151 <sup>a</sup>	
Madagascar (1994)	Mgfr	1413		2136 <sup>a</sup>	
South Africa (1992–93)	rand	98		516 <sup>a</sup>	

<sup>a</sup> Average cost of all (inpatient and outpatient) hospital visits.

<sup>b</sup> Rural only.

### Understanding the benefit incidence of health subsidies

To understand why curative health spending is not targeted to the poor in Africa, it is helpful to distinguish between the two proximate determinants of benefit incidence: first, the allocation of health budgets across different levels of service (the  $s_j$  values of eq. (2)); and second, the share of the poorest quintile in total visits at each level of service (the  $b_{ij}$  values). These two factors are obviously related: as governments change the allocations of spending across subsectors, they influence the way households choose among treatment options, which would in all probability change the quintile shares of health visits. For convenience we examine each in turn.

The allocation of spending across services within the health sector is not favourable to the poor. Governments allocate significant shares of their health budgets to hospital-based services, which the poor generally do not use. In Ghana, for example, two-thirds of the health budget was spent on hospital services; a major portion went to one large teaching hospital in Accra. In South Africa the share allocated to hospitals was 89%. And in both Madagascar and Kenya more than half of the health budget was devoted to hospitals. It is safe to say that targeting health spending to the poor in Africa would require spending less on hospitals and more on primary facilities.

Spending on hospital-based health care can, however, be justified to some extent because many large hospitals train medical personnel for lower levels of care. Moreover, one of the reasons why governments subsidize tertiary health services is that there is no insurance market. Households in developing countries cannot insure themselves against the risk of serious illness or injury and the consequent need for very expensive treatment. As the data show, this allocation of the health subsidy to tertiary care can be at the expense of the equity objective, because the poor tend not to use hospital services.

In Kenya, South Africa, and the United Republic of Tanzania, budget reallocations towards

Table 3. Benefit incidence of public spending on health in selected countries

Country	Quintile shares of								Total subsidy as % of per capita expenditure	
	Primary facilities		Hospital outpatient		Hospital inpatient		All health			
	Poorest	Richest	Poorest	Richest	Poorest	Richest	Poorest	Richest	Poorest	Richest
<b>Africa</b>										
Côte d'Ivoire (1995) <sup>a</sup>	14	22	8	39			11	32	2.0	1.3
Ghana (1992)	10	31	13	35	11	32	12	33	3.5	2.3
Guinea (1994) <sup>a</sup>	10	36	1	55			4	48		
Kenya (1992) <sup>a, b</sup>	22	14	13	26			14	24	6.0	1.1
Madagascar (1993) <sup>a</sup>	10	29	14	30			12	30	4.5	0.5
United Republic of Tanzania (1992–93)	18	21	11	37	20	36	17	29	NA <sup>c</sup>	NA
South Africa (1994) <sup>a</sup>	18	10	15	17			16	17	28.2	1.5
<b>Others</b>										
Indonesia (1990)	18	16	7	41	5	41	12	29	1.0	0.5
Viet Nam (1993)	20	10	9	39	13	24	12	29	2.1	0.9

<sup>a</sup> Hospital subsidies combine inpatient and outpatient spending.

<sup>b</sup> Rural only.

<sup>c</sup> NA = not available.

primary care would in themselves improve the targeting of spending to the poor. In these countries, the poorest quintiles use primary facilities in good measure, gaining about one-fifth of the primary subsidy — a pattern similar to that found elsewhere in the developing world (13). But in the other African countries, budget reallocations alone would not necessarily fix the targeting problem. In Côte d'Ivoire, Ghana, Guinea, and Madagascar the share of the subsidy received by the poorest quintile was low at all levels of health care, including primary facilities. Given the costs and benefits involved, household decisions about using publicly subsidized curative health care services result in far fewer visits to primary facilities from poor households than from better-off ones. The point is that budget reallocations (changes in the  $s_i$  values) must be accompanied by increased use of primary facilities by poor households (changes in the  $h_{ij}$  values). To identify the interventions that would have this effect, it is necessary to understand why the poor limit their use of publicly funded health facilities.

We consider here five principal factors that affect the use of health services by the poor: income, service quality, access, direct user charges, and gender.

## Income

Health care is a normal good, which means that household spending on health — and the use of health facilities — increases with income (Table 4). But as Table 1 shows, the richest groups use mainly publicly subsidized health care (except in South Africa). In Ghana the richest quintile directed almost 60% of its health spending to the public sector, much of it on hospital consultations (14). This means that

health spending is very unlikely to be targeted to the poor. Given the fundamental influence of income on the demand for health care, the only way in which public subsidies can be well targeted to the poorest is by diverting to the private sector the demand for health care by those who are better off. That is no easy task in countries where private health care is generally poorly developed, largely because of the dominance of the public sector. This change has to be considered a long-term objective. In the meantime, are there other factors amenable to shorter-term policy interventions that might mitigate this powerful income effect?

## Quality differences

Alderman & Lavy (15) report that the demand for health care is sensitive to the quality of the service provided. Even poor households limit their demand for health care when services are of poor quality. But they are less sensitive to changes in quality of service (16). Thus uniformly poor quality service would discourage demand more among the rich than the poor, which would be inconsistent with the observed share of each quintile's participation in health care services. The observed pattern can therefore be explained only by significant differences in the quality of service offered to the rich and the poor. So, for instance, drug availability, staff skills, and the quality of health facilities may vary considerably and to the disadvantage of the poor. Is there any evidence of such variations in quality? A special survey of health facilities designed to accompany the Ghana Living Standards Survey of 1989 suggests that there is (16). The earlier discussion of unit subsidies in Ghana also implies the presence of large variations in quality (Table 2). Similarly, in Antananarivo, a region in Madagascar where 23% of the population is poor, the

government unit subsidy for basic health care was just 41% of the subsidy going to the richest region, Antsiranana, with a total poverty headcount of only 7% (12). These comparisons suggest that there may well be differences in the care provided at different health facilities, to the disadvantage of poorer households.

### Access and opportunity costs

Poor households are often some distance from government health facilities, and members of these households typically face long journeys and high opportunity costs to obtain health care. In South Africa, for example, those in the poorest quintile must travel almost 2 hours on average to obtain medical attention, compared with an average of 34 min for the richest quintile (17). The Ghana Living Standards Survey of 1992 also recorded longer travel and treatment time for poorer households. Time spent away from economic activity represents much greater private opportunity costs for the poor, who, unlike their salaried counterparts, have to forgo income in order to obtain medical care. These costs can dominate the decision to seek care.

Lavy & Germain (16) found that halving the distance to public health facilities in Ghana increased their use among the population at large by an estimated 96%. In Kenya distance was also a significant factor in the demand for health care, although not as dramatic as in Ghana (18). Lavy & Germain (16) found that the poor were willing to pay less than the non-poor in absolute terms, but more relative to their income, to reduce the distance travelled. Gertler & van der Gaag (19) found that individuals at the lower end of the income distribution in Côte d'Ivoire were far more sensitive to changes in the time required to obtain care than were those at the upper end. Time, in effect, rations the market. These studies are based on cross-sectional evidence, however, so direction of causation is uncertain; the relationship between use and distance might be capturing the effect of geographic variations in health care utilization on government decisions about placement of health facilities rather than the other way around.

### Price

The cost of a medical consultation is far more of a burden for the poor. Ample evidence suggests that when prices are raised through cost recovery schemes, the poor are more likely than the non-poor to cut back on their use of health services (16, 19). Longitudinal studies based on controlled experiments such as those by Litvack & Bodart (20) in Cameroon and by Gertler & Molyneaux (21) in Indonesia confirm that price increases without compensatory improvements in quality discourage utilization by the poor. Increasing user charges, other things being equal, lowers the share of the poor in total visits to health facilities. Charges must therefore be introduced carefully; they must be targeted to

Table 4. Per capita household spending on health

Country/quintile	Health spending	% share in	
		Non-food expenditure	Total expenditure
Côte d'Ivoire (1988)	(CFA fr)		
Poorest	3347	13.4	5.4
2	5174	12.0	5.1
3	7738	12.7	5.6
4	9419	9.8	4.6
Richest	14 407	6.3	3.7
Ghana (1992)	(cedi)		
Poorest	2964	12.7	4.6
2	4524	11.7	4.5
3	6314	12.0	4.7
4	8306	11.2	4.6
Richest	12 452	7.5	3.4
Madagascar (1993–94)	(Mgfr)		
Poorest	1133	6.9	1.8
2	2528	8.1	2.2
3	2573	6.2	1.6
4	2139	3.0	0.9
Richest	4581	1.5	0.7

services used mainly by the non-poor; and if applied to services used by the poor, they should be accompanied by improvements in both access and quality. Clearly, this is a subject that needs further investigation. The effects of introducing user charges for health care should be monitored very carefully, focusing especially on the impact on the health decisions of poorer households.

### Gender

Income, quality, access, and price interact with social relationships to produce sharp inequalities in the distribution of health benefits by gender. Females in the top quintiles in Côte d'Ivoire and Ghana, for example, typically use publicly funded health facilities more than do their male counterparts (Table 5). But this advantage changes markedly for the poorest quintiles. The female advantage is largely eroded in Côte d'Ivoire, although poor females still use facilities more so than males, and in Ghana poor females use health facilities less than do males in the same quintile. The reasons for this are unclear. Supply-side effects may account for the difference; the facilities available to the poor may not provide the perinatal care used by their richer counterparts. Or the difference may arise from demand-side household preferences. Poor households may decide that females should not use health facilities, either because of underlying social values favouring males over females or because of higher opportunity costs of female time. Either way, poor households behave differently from rich households, and this difference explains to some extent the weak targeting of the health subsidy to the poor in Africa.

Table 5. Benefit incidence of health spending by gender

Country	Quintile	% share <sup>a</sup>	
		Female	Male
Côte d'Ivoire (1995)	Poorest	52.9	47.1
	Richest	55.0	45.0
Ghana (1992)	Poorest	44.3	55.7
	Richest	65.0	35.0

<sup>a</sup> Share of quintile subsidy accruing to each gender group.

Table 6. Ghana, health sector accounting, 1992

	Government subsidy		Household spending <sup>a</sup>		Total spending	
	Mean (cedi)	Share (%)	Mean (cedi)	Share (%)	Mean (cedi)	Share (%)
Poorest	2296	12	1998	10	4294	11
Richest	6515	33	7099	37	13 614	35

<sup>a</sup> Household spending on publicly subsidized curative health services.

### Concluding observations

This review of several African countries does not present a particularly encouraging picture. Although spending on social services is usually justified on equity and efficiency grounds, most curative health subsidies in the region are not particularly well targeted to the poorest. While it is true that other elements in health budgets directed at preventive health and public health services are likely to favour the poor more than curative subsidies, there are grounds for considering that the results we report underestimate the true inequality in curative care. Regional variations in unit subsidies and in the quality of services provided, largely ignored in the results reported here, are likely to further disadvantage the poor. Moreover, the poor are less able than the better-off to augment government subsidies by contributing to the services obtained (Table 6).

One of the most fundamental factors responsible for weak targeting is the positive income elasticity of demand for these services. In the long run, the strategy should encourage private providers so that the public subsidy can be directed more effectively at services used mostly by the poor. But there are instruments that could improve targeting in the short and medium term. The first involves reallocating public subsidies towards services used primarily by the poor. On this, the evidence is mixed:

in health, many of the poor do not use any services very much, even primary services. Expenditure reallocations would improve targeting only if they led to a significant increase in the use of such services by the poor.

Changes in household behaviour, therefore, are critical. One class of interventions involves dealing directly with household perceptions of illness and health care. The data in Table 1 raise questions about just how much understanding poorer households have of the nature of illness and the need for treatment. Public health awareness campaigns targeted at poor geographical areas can influence directly the household's ability to recognize an illness, and to appreciate the importance of timely health care.

Another class of interventions involves inducing changes in household behaviour through changing the characteristics of the service provided. Two characteristics appear to be important: quality of service and access to facilities. The poor are not well served by the public provision of curative services. Such services as are available are costly to access. The evidence suggests that the poor would be willing to increase their use of health services if both quality and access could be improved. It also points to the need for increased attention to the infrequent use of health services by poor women. A well-designed user fee policy could potentially improve the benefit incidence of health spending, but the decision to impose such fees should be undertaken with care. Fees should be applied to services where total demand (for private and public services) is price inelastic and where good quality private services are available. They should not be applied where good quality private services are unavailable or where the demand is very price elastic (those services used mainly by the poor, for example). If user fees are combined with significant improvements in both access and quality, there is evidence that the poor will increase their use of the service (19).

Benefit incidence has provided important insights into the problems facing governments in Africa that are struggling to deliver essential social services to poor communities. But although it highlights the problems, it is short on answers. For Africa, at least, the message is that reallocations of public expenditures are not sufficient; policies must be based on a sound understanding of the factors that govern household decisions about health care and of the means by which subsidized services can lead to better outcomes for the poor. ■

### Résumé

#### Les dépenses publiques relatives aux soins de santé en Afrique : les pauvres en profitent-ils ?

Les soins de santé sont censés constituer un service fondamental, indispensable dans toute lutte contre la pauvreté. Le présent article passe en revue les bénéfices découlant des dépenses publiques consacrées aux soins

curatifs dans sept pays africains (Afrique du Sud, Côte d'Ivoire, Ghana, Guinée, Kenya, Madagascar et République-Unie de Tanzanie). L'analyse de ces bénéfices comprend trois étapes :

- l'estimation des subventions unitaires ;
- l'affectation des subventions aux utilisateurs ; et
- la comparaison de la répartition des subventions entre les différents groupes.

La subvention unitaire représente le coût net actuel, pour un gouvernement, d'une consultation dans les établissements de santé. La subvention d'une consultation à l'établissement de soins de santé primaires est moins onéreuse pour un gouvernement qu'une consultation à l'hôpital, et les consultations ambulatoires sont considérablement moins coûteuses que les soins hospitaliers. Au Ghana, une consultation ambulatoire représente le dixième du coût d'un soin hospitalier et en Guinée cette proportion est de 1 pour 7. Les établissements publics dispensent habituellement plus des deux tiers des soins médicaux dans ces pays. Les pauvres ont tendance à se rendre dans ces établissements publics, mais les plus favorisés le font aussi, étant donné la lenteur avec laquelle se développent les soins de santé privés dans la plupart de ces pays.

Le fait de combiner les subventions unitaires concernant la prestation des soins de santé avec l'utilisation des établissements de santé fonctionnant à l'aide de fonds publics permet d'estimer les bénéfices découlant des dépenses publiques en matière de santé. Il en ressort deux messages clairs.

- Les dépenses de santé consacrées aux soins curatifs en Afrique ne sont pas destinées uniquement aux plus pauvres. La part de la subvention accordée au quintile le plus pauvre est considérablement moindre que celle octroyée aux 20 % les plus riches.
- Les dépenses de santé progressent raisonnablement. Si on considère celles-ci comme une part du revenu, les pauvres reçoivent davantage que les plus favorisés. Si le gouvernement accordait à tous les ménages un transfert de revenu plutôt que des soins de santé subventionnés, la répartition du revenu s'améliorerait.

S'agissant des bénéficiaires, il est utile de faire la distinction entre deux déterminants : l'allocation du

budget de la santé entre les différents niveaux de services et la part des pauvres dans le total des consultations à chaque niveau de services. L'affectation des dépenses ne favorise pas les pauvres. Les gouvernements consacrent une part importante de leur budget de santé aux services hospitaliers, que les pauvres utilisent rarement. Au Ghana, deux tiers du budget de la santé sont accordés aux services hospitaliers ; une grosse partie est allouée à un grand hôpital universitaire d'Accra. A Madagascar comme au Kenya, plus de la moitié dudit budget est affectée aux hôpitaux. Si l'on veut concentrer les dépenses de santé sur les pauvres en Afrique, il faut donner moins d'argent aux hôpitaux et en octroyer davantage aux établissements de soins de santé primaires.

Au Kenya, en Afrique du Sud et en République-Unie de Tanzanie, le seul fait de réallouer le budget aux soins de santé primaires améliorerait le ciblage des pauvres. Dans d'autres pays, la part de la subvention reçue par le quintile le plus pauvre est faible à tous les niveaux de santé, y compris à celui des établissements de soins de santé primaires. Les réallocations budgétaires doivent aller de pair avec une utilisation accrue des établissements de soins de santé primaires par les ménages pauvres. Il est essentiel, à cette fin, que ces ménages modifient leur comportement. Des campagnes de sensibilisation à la santé publique visant les régions géographiques pauvres permettent d'influer directement sur la décision du ménage de se faire soigner à temps. Une autre classe d'interventions comprend la modification des caractéristiques du service fourni. Deux caractéristiques semblent particulièrement importantes : la qualité du service et l'accès aux établissements de santé. Certains éléments donnent à penser que les pauvres seraient prêts à utiliser davantage les services de santé si la qualité et l'accès pouvaient en être améliorés ; ils montrent par ailleurs qu'il faut accorder plus d'attention au fait que les femmes pauvres utilisent rarement ces services.

## Resumen

### Gasto público en atención de salud en África: ¿se benefician los pobres?

Se reconoce que la atención de salud es un servicio básico fundamental en la lucha contra la pobreza. En este artículo se analizan los beneficios que se derivan del gasto público en salud curativa en siete países de África (Côte d'Ivoire, Ghana, Guinea, Kenya, Madagascar, Sudáfrica y la República Unida de Tanzania). Para determinar esos beneficios se requieren los tres pasos siguientes:

- estimación de las subvenciones unitarias;
- imputación de las subvenciones a los usuarios; y
- comparación de la distribución de las subvenciones entre grupos.

La subvención unitaria representa el costo actual neto para el Estado de una visita a los centros de salud. La subvención de una visita a un establecimiento de atención primaria es menos costosa para el Estado que la visita a un hospital, y las visitas de pacientes ambulatorios son considerablemente menos costosas

que las visitas de atención hospitalaria. En Ghana el costo de la visita de un paciente ambulatorio equivale a la décima parte del de una visita de atención hospitalaria, y en Guinea la razón es de 1:7. Habitualmente los servicios públicos proporcionan más de dos tercios de la atención médica en estos países. Los pobres suelen depender de los servicios públicos, pero lo mismo ocurre con las clases más acomodadas, debido a la lentitud con que se desarrolla la atención sanitaria privada en la mayoría de esos países.

Teniendo en cuenta las subvenciones unitarias de la dispensación de asistencia y el uso que se hace de los centros de salud financiados con fondos públicos, es posible estimar los beneficios logrados con el gasto sanitario público. Del examen se desprenden dos conclusiones claras:

- El gasto en atención curativa en África no está bien enfocado a los más pobres. En general la proporción

de subvenciones destinada al quintil más pobre era significativamente inferior a la destinada al 20% más rico.

- El gasto sanitario es razonablemente progresivo. Como proporción de los ingresos, las clases pobres consiguen más que las acomodadas. Si el Estado transfiriese a todos los hogares unos ingresos en lugar de subvencionar la atención de salud, la distribución de ingresos mejoraría.

Conviene distinguir dos factores determinantes de las mejoras de salud, a saber: la distribución del presupuesto sanitario entre los diferentes niveles de asistencia; y la proporción de pobres en las visitas totales a cada nivel de asistencia. La distribución del gasto no favorece a los pobres. Los gobiernos asignan una importante proporción de su presupuesto de salud a los servicios hospitalarios, servicios que en general no utilizan los pobres. En Ghana, dos tercios del presupuesto de salud se dedicaban a los servicios hospitalarios; una parte considerable se destinó a un importante hospital docente construido en Accra. Tanto en Madagascar como en Kenya, más de la mitad del presupuesto de salud se dedicaba a hospitales. Para orientar el gasto sanitario a los pobres en África hay que invertir menos en hospitales y más en centros de atención primaria.

En Kenya, Sudáfrica y la República Unida de Tanzania, la reasignación de partidas presupuestarias a la atención primaria sería una medida que por sí misma mejoraría la focalización de la asistencia en los pobres. En otros países, la proporción de subvenciones recibida por el quintil más pobre fue baja en todos los niveles de asistencia, incluidos los centros de atención primaria. Las reasignaciones presupuestarias deben ir acompañadas de un mayor uso de los centros de atención primaria por los hogares pobres. Para ello, es fundamental introducir cambios en el comportamiento de las familias. Las campañas de sensibilización en materia de salud pública orientadas a las zonas geográficas pobres pueden influir directamente en las decisiones de las familias de buscar atención de salud cuando hace falta. Otro tipo de intervenciones guardan relación con la modificación de las características de los servicios prestados. Dos características parecen particularmente importantes: la calidad de la asistencia y el acceso a los centros. Los datos disponibles parecen indicar que los pobres estarían dispuestos a recurrir más a los servicios de salud si mejorasen tanto su calidad como el acceso a ellos, y señalan asimismo la necesidad de prestar más atención al problema que supone el escaso uso que las mujeres pobres hacen de los servicios de salud.

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