satisfied with what I'm doing [professionally] and on top of that a more agitated life and the struggle to survive.

Participants were asked under what conditions they would consider returning to their countries of origin. Economic stability was the most often cited pre-requisite for return. One participant said that if a technical assistance project in his country of origin were recruiting personnel, she would return.

Discussion and conclusions

For the interview participants in this study, inadequate salaries, family reasons, and education of their children were the principal immediate factors, which caused them to emigrate from their countries of origin. In most cases, a combination of two or more of these reasons applied. This suggests that for these health professionals the decision to emigrate—like most major personal decisions--is multiply determined. One implication for policy-makers of the causal complexity among factors spurring emigration is that the marginal effect of policy reforms addressing one or more of the multiple determinants of emigration may be sufficient to retain some proportion of health professionals, even when other determinants of emigration are present. For example, improving educational opportunities for the children of health professionals may reduce brain drain even when salaries remain low and other family-related reasons for emigration remain unaltered.

All of the interview participants in this study had had to abandon their professions after immigration. The employment they were able to obtain in Portugal was generally unskilled (nursing home aide, cleaning service), and offered few social security benefits and no long-term security. Six of the eight participants were earning more than the national minimum wage of $3,850 annually.

When asked about their views regarding their decision to emigrate, the participants expressed vehement indignation at the Portuguese legislation and bureaucracy, which they felt, was unfairly preventing them from working in their professions. The participants' comments revealed the degradation they felt in going from high-status (albeit low-paid) professional roles in their countries of origin to low-status jobs in which they have little control over their environment and are treated with little respect by their bosses and colleagues. It is clear that the participants were struggling to cope with the discordance between their present realities and the professional ethic

and pride they had developed in as elite in their countries of origin (as expressed in statements such as "nursing is universal," and "the class of nursing is a class that we have to defend at every moment of our life").

The results of this study offer little encouragement for Ministries of Health seeking ways to encourage the return of health professionals who have emigrated. Given the difficult conditions in the study community and the inability of the participants to secure work in their professions, it is reasonable to view these participants as among the more likely to return than, for example, other emigrants who had succeeded in working in their professions. Yet none indicated any concrete intentions to return. Even direct questions about the conditions, which might motivate them to return, stimulated only a vague response about returning "some day."

Managing health services in developing countries: moonlighting to serve the public?

Jean Macq and Wim Van Lerberghe

Introduction

Since the late 1980s it has become commonplace to blame 'government failure' for the public sector's inability in poor countries to deliver efficient quality care and to regulate the health sector. 'Unproductive', 'poorly motivated', 'inefficient', 'client unfriendly', or 'corrupt' civil servants get a large share of the blame. The moralistic connotation of these adjectives contrasts with a *de facto* tolerance of authorities towards behaviour that, to say the least, is not always congruent with what is expected from a civil servant.

Predatory behaviour among poorly paid public sector clinicians is certainly a problem. Under-the-counter payments for access to 'free' services or goods are common.[80] The problems related to combining salaried public sector clinical work with a fee for service private clientele are also increasingly recognised.[81]

[80] Lambert, D. (1996) Unofficial health service charges in Angola in two health centers supported by MSF. MSF medical news 5, 24-26. Meesen, B. (1997) Corruption dans les services de santé: le cas de Cazenga. MSF-Repères, 5, 1-20.. Parker, D. and Newbrander, W. (1994) Tackling wastage and inefficiency in the health sector. World Health Forum,. 15, 107-13.

[81] Aljunid, S. (1995) the role of private medical practitioners and their interactions with public health services in Asian countries. Health Policy and Planning 10, 333-349. Alubo, S.O. (1990) doctoring as business : a study of entrepeneurial medicine in Nigeria. Medical Antropology 12, 305-324. Chiffoleau, S. (1995) Iti-

Like many clinicians, the managers of public health services also often practice in an inadequate economic and professional environment. Unlike clinicians, they cannot take advantage of the contact with patients to extract under-the-table fees. Some may abuse their position for corruption or misappropriation of public goods, but most resort to other individual coping strategies.[82] They dedicate part of their working time and energy to activities that are not, strictly speaking, what the State pays them to do. They may take up a second job: teaching, consultancies for non-governmental or development agencies, private practice, or non-medical activities that generate extra income. Others manage to get seconded to non-for-profit NGOs or health development projects, or concentrate on activities that benefit from donor-funded per diems or allowances.[83]

However, little is known about the extent of the phenomenon, about the consequences for the proper use of the scarce public resources dedicated to health in developing countries, or about the balance of economic and other motives for doing so.[84]

We have investigated work mix and income generation among public health civil servants in managerial positions in developing countries. The aim was to understand to what extent public sector health care managers engage in other income-generating activities, whether this really corrects 'unfair' salaries, and what possible consequences are for the health care system.

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néraires médicaux en Egypte. Revue Tiers Monde 36, 515-530. Frenk, J. (1993) The public/privatemix and human resources for health. Health Policy and Planning 8, 315-326. Roemer, M.I. (1984) private medical practice. World Health Forum 5, 195-210. van der Gaag, J., Stelcner, M. and Vijverberg, W. (1989) Wage differentials and moonlighting by civil servants: evidence from Côte d'Ivoire and Peru. The World Bank Economic Review, 3, 67-95. Kamat, V.R. (1995) Reconsidering the popularity of primary health centers in India: a case study from rural Maharashtra. Social Sciences & Medicine, 41, 87-98.

[82] Roenen, C., Ferrinho, P., Van Dormael, M., Conceição, M.C. and Van Lerberghe, W. (1997) How African doctors make ends meet : an exploration. Tropical Medicine and International Health 2, 127-135.

[83] Gloyd, S. (1996) NGOs and the "SAP"ing of health care in rural Mozambique. Hesperian Foundation News, 1, 1-8.

[84] Asiimwe, D., Mc Pake, B., Mwesigye, F., Ofoumbi, M., Ortenblad, L., Streefland, P. and Turinde, A. (1997) The private-sector activities of public-sector health workers in Uganda. The nature and characteristics of health-care markets. Berche, T. (1996) Per-diem et topping-up. quelques enjeux de pouvoirs et stratégies dans un projet de santé au Mali. Bullatin de l'APAD 11, 128-138. Roenen, C., Ferrinho, P., Van Dormael, M., Conceição, M.C. and Van Lerberghe, W. (1997) How African doctors make ends meet : an exploration. Tropical Medicine and International Health 2, 127-135.

The information comes from a mail survey of 437 African, Asian and Latin American physicians who had obtained an MPH degree in Europe between 1976 and 1996. 101 of 138 respondents were considered eligible, as they worked as civil servants in their own country, in a managerial or in a mixed managerial-clinical position. Their median age was 45 and they had obtained their MPH on the average 16 years before the survey. They can be considered as fairly well advanced and stable in their careers. Although primarily managers, about one in two also had clinical and teaching duties as part of the terms of reference of their public sector job.

A fair salary?

The median salary of these civil servants is US$ 5,000 per year. Corrected for purchasing power parity (PPP) they range between US$ 2,671 and US$ 89,111 per year (median 19,432) (Figure 8). On top of their salaries 54 respondents also have fringe benefits such as free housing (9), a car (28) or both (17).

In low-income countries this puts doctors-managers definitely among the privileged in their societies. All but two have net salaries that are higher than the average GDP(PPP) per capita of the richest quintile in their country. For one third this remains the case after adjusting for dependants. In purchasing parity terms respondents from middle-income countries earn twice as much as those from low-income countries.

More relevant to what the managers perceive as a 'fair' income is a comparison with what their peers earn in alternative occupations in the same context. Two attractive alternative occupations are private practice and expert-consultancy work for development agencies or NGOs.

A month's salary corresponds roughly to the fees for one week's consultancy work, at going rates, and is equivalent to less than one quarter (median 22%) of the monthly proceeds of a small private practice of 15 patients per day (Table 37). Their public sector salary may thus put these managers among the well-off compared to the distribution of GDP in their countries, but it definitely remains below what they can reasonably expect from alternative occupations in their own field and in their own country. The gap is particularly impressive in low-income countries.

Figure 8. Distribution of the public sector salaries of the respondents, in US$ at current exchange rates and corrected for purchasing power parity, compared to per capita GDP corrected for purchasing power parity

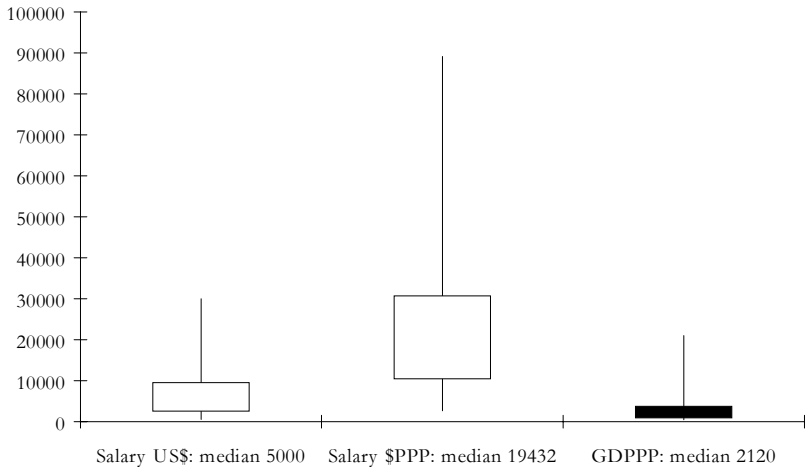


Table 37. Median and range of take-home salaries

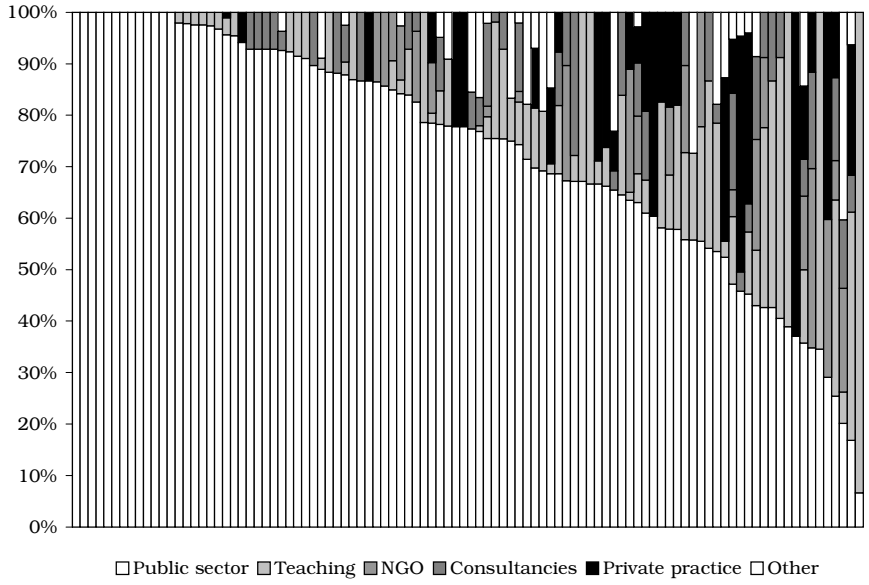
	Low-income[85] *countries (61 respondents)*	*Lower-middle-income countries (32 respondents)*	*Upper-middle-income countries: (7 respondents)*
In US$ at official exchange rate	3,802 (522-14,201)	10,177 (780- 24,960)	20,400 (9,600-30,000)
In US$ corrected for purchasing power parity	13,890 (2,671-51,692)	29,666 (3,024-89,101)	21,111 (9,935-31,046)
As % of the income of a private practice of 15 patients/d	14% (6-176)	30% (13-150)	28% (10-42)
As % of the income of 250d/y full-time consultancy work	31% (3-238)	76% (11-228)	107% (29-158)

[85] Low-income countries in the sample: Burkina-Faso; Burundi; Cameroon; Cape Verde, China; Congo; Ivory Coast; Erythrea; Ethiopia; Ghana; Guinea; Haiti; India; RDP Laos; RD of Congo; Togo; Viet Nam; Madagascar; Mauritania; Mali; Nicaragua, Niger; Uganda; Senegal; Tanzania. Lower middle-income countries include Bolivia; Ecuador; Indonesia; Morocco; Peru; Philippines; Salvador; Surinam; Thailand; Tunisia. Upper-middle-income countries are Brazil, Argentina and Mexico. Classification and PPP correction factors: World Bank (1997) World Development Report 1997, Washington D.C.: Oxford University Press.

Extra work. . .

Less than one third the respondents spend 90% or more of their time to their public sector assignment. Eighty-seven percent have at least one other job. Figure 9 shows how working time is distributed between civil servant tasks and other activities. Forty-nine respondents do work for NGOs or development agencies: 22 through stable secondments to projects and 40 through ad hoc consultancies or other occasional activities such as seminars. Almost two out of three (64%) teach. Twenty seven percent have an income from business or agriculture; this takes up between 2 and 40% of their working time (median 13%).

Figure 9: Proportion of working time of 100 public health services managers spent on public sector work, teaching, work with NGOs and consultancies, private practice, and other income generating activities (each vertical bar represents one respondent)



Private patients take between 2 and 63% (median 18%) of the time of 29 respondents. Four of these work in settings where there are no restrictions on this. Legislation is restrictive in all other settings, although many are either confused about what the regulation actually entails (17) or com-

ment that legislation is not controlled or enforced (37). Only four respondents stress that legislation is restrictive and strictly enforced.
Eventually, out of 100 person-years theoretically available for civil-servant work, they spend 10.3 person-years teaching, 7.3 person-years working with or for non-for-profit NGOs or donor agencies, 5.9 doing private practice, and 3.1 farming or operating small businesses. This leaves 73% of the theoretically available person-time for public service. Half of the respondents are available less than 75% of the expected working time. For 15% public sector employment corresponds, in practice, to less than a half-time job.

. . .. and extra income

Some of the additional work for NGOs (8/25) or teaching (19/37) is provided for free. As a rule, however, the extra work is paid. Private practice, ad hoc consultancy work and business or agriculture each generate an income that is 2.4 times the civil servant salary for the same amount of time (median 2.4, ranges 0.6-10, 0.3-54, and 0.6-9.1 respectively). Secondment to NGOs pays 1.3 times the salary (range 0-26), whereas teaching pays less, on an hourly basis, than the public sector: a ratio of 0.13 (range 0-26).

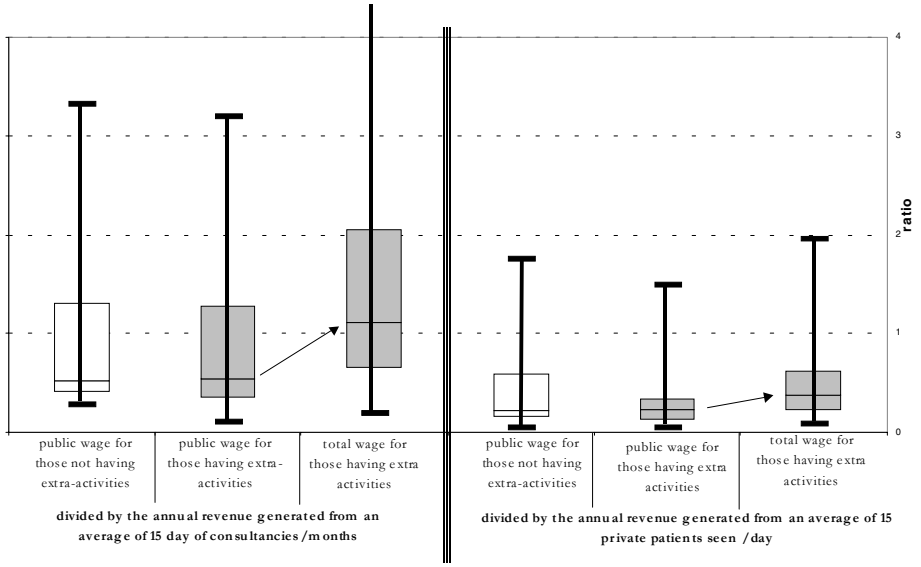
On the whole these side-activities generate a substantial extra income. They increase the income with between 50 and 80% of the public salary (Figure 10, Table 38).

The end result is a total monthly income equivalent to the fees these same doctors could earn by doing 15 working days of consultancy work, or one third of what they would have earned in a month from a small private practice of 15 patients per day. By combining various jobs the respondents from middle-income countries get a total income that approaches what they would earn by free-lancing 250 days per year (which would be pretty unrealistic). Compared to a private practice, however, their income remains pretty low, even if such practice is limited to 15 patients a day.

Table 38. Median and range of total income (salary plus income from extra activities) of civil servant health service managers

	Low-income countries (61 respondents)	*Lower-middle-income countries (32 respondents)*	*Upper-middle-income countries (7 respondents)*
Income in US$ at official exchange rate	5899 (522-21053)	15383 (1380-44000)	34880 (21600-91680)
In US$ corrected for purchasing power parity**	21438 (4081-84640)	47443 (5351-121080)	32453 (22353-45327)
Compared to GDP (PPP) per inhabitant	20 x higher (2.6-129)	9.7 x higher (1.4-38.7)	4.0 x higher (2.4-4.9)
As % of the income of a small private practice of 15 patients per day	27% (8-196)	40% (15-180)	37% (6-30)
As % of the income full-time consultancy work (250d/yr)	50% (4-560)	107% (14-780)	140% (35-231)

Figure 10: Increase in income through side-activities, expressed as the ratio of income form doing 15 working days consultancies per month, or form doing a daily private practice with 15 patients per' day



Competition for time and conflicts of interest

When the public authorities recruit civil servants to manage health services they expect them to be available on a full-time basis.

Clearly, this is often not the case, and the self-reported 73% of working time spent on official duties are probably overstated. Given the selection biases in the sample it is likely that in many situations a much greater proportion of working time is spent on activities that do not fit in with the public service job descriptions. This would result in a significant transfer of salary-resources out of the public sector – at least the equivalent of 27% of the salary mass in diminished availability – further compounded by the use of transport, office infrastructure and, at times, of diagnostic and therapeutic resources of the public service.

Apart from competition for time and transfer of resources out of the public sector, other effects on the system depend on the presence of conflicts of interest. Doing business or agriculture is neutral towards health services, but constitutes a *de facto* internal brain drain. In the case of teaching conflicts of interest are unlikely. Involvement in teaching actually probably benefits both the health system and the teaching institutions, as it reinforces the contact of trainees with the realities of the health services. Private practice presents, in the case of these managers, less of a problem of conflict of interest than it would for clinicians. Involvement in NGO projects or work for donors can foster better co-ordination in the provision of services, but may constitute a conflict of interest when NGO or project policies are at odds with national health policies.

Whatever the effect of moonlighting on the health care system, the implications for income are considerable and cannot be ignored. It allows a standard of living that is closer to what these doctors-managers expect, and thus helps retain valuable elements in public service. But money is obviously not the only reason for taking up a second job. The involvement in (relatively unrewarding) teaching, or in unpaid NGO work show that social responsibility, self-realisation, professional satisfaction, working conditions and prestige also play a role. Money is not, either, the only factor in retaining staff. Most could earn much more in private practice, at the locally going rates, but remain in office, and spend comparatively little or no time on private practice. It is unlikely that this is only for lack of opportunities – a saturated private health care market, or too much competition from the 'real' clinicians. There must be other sources of motivation to keep on managing public services.

What strategies can public authorities and development agencies propose?

In recent years the phenomenon of moonlighting has increased, fuelled, by a worsening professional situation of civil servants in many countries and by the *de facto* tolerance of public sector authorities. In this context it is unavoidable that managers look for additional work that is more rewarding, professionally and financially. As long as it does not get in the way of the performance of the public sector, this should not be too much of a problem. But in many, if not most poor countries the situation has got out of hand: even the collective memory of dedicated public doctors is fading.

There is a limit to the possibilities and attractiveness of moonlighting. In many parts of the world the number of doctors increases faster than the carrying capacity of development agencies to recruit managers, or of the population to support fee-for-service private practice. It would be an illusion, however, to hope to save public service merely by counting on market mechanisms to make an inadequate salary, poor career prospects and a depressing working environment competitive.

There are four ways out that seem easy only at first glance: prohibit moonlighting; increase salaries; downsize the public health sector; or introduce new public management type performance-linked incentives.

Prohibition of moonlighting without changing the salary scales is probably one of the least effective ways to tackle the problem. Enforcement is unlikely when the problems in retaining motivated staff become obvious, and the enforcers are in the same situation as those who have to be disciplined. As an isolated measure restrictive legislation only drives the practice underground and makes it difficult to correct or avoid negative system effects.

To close the salary gap by raising public sector salaries to 'fair' levels is not a realistic option in most poor countries. In the average low income country salaries would have to be multiplied by at least 5 to bring them to the level of the income from a small private practice. Doing this for all civil servants is not imaginable; doing it only for selected groups such as doctors-managers would be politically very difficult, if financially possible.

Downsizing would make it possible to divide the salary mass among a smaller workforce, thus increasing individual salaries. Experience with attempts at downsizing are disappointing: it usually provokes enough resistance among civil servants never to get to a stage of implementation, and where retrenchment becomes a reality this is not followed by substantial salary increases.

The rationale for the introduction of new public management techniques with performance linked incentives is that these would take care of a major drawback of the fact that managers engage in supplementary activities: the competition for working time. However, such approaches require performance measurement, which depends on a well functioning, transparent and honest bureaucratic system. The countries that would benefit most from new public management are the ones where it is *a priori* most difficult to implement on a large scale.

What is more likely to work is a piecemeal approach of trying to limit the negative effects for the system. A first pre-requisite is to deal with the problem openly. This is necessary if one wants to discourage those income generating activities that represent a conflict of interest, whilst leaving the door open for less harmful alternatives that can take the pressure off the system.

Second, it supposes a better understanding of and more attention for the other factors that help retain personnel. Good performance requires a proper working environment, but also investment in the career prospects, training perspectives, and freeing the professional from the clientelism and the arbitrary prevalent in the public sector of many countries.

Third, it means regulating and organising things in a transparent way, so as to minimise the feeling of unfairness among colleagues and the level of uncertainty in the availability of services.

All this is unlikely to be possible through bureaucratic regulation alone – from government or from donor agencies. Without building up pressure from peers as well as from users, disinvestment by civil servants is likely to increase rather than diminish.