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**THE PROBLEM OF DECREASING INCOME AND
INCREASING COST OF HEALTH CARE IN CAMEROON**

Par Aloysius Ajab Amin

ORSTOM

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Observatoire du Changement et de l'Innovation Sociale au Cameroun
Observatory of Change and Innovation in the Societies of Cameroon

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Abstract

In Cameroon since 1986, the per capita income has had a drastic drop and it is now at the 1980 level. Yet the price of health services has been rising sharply. The paper looks at the structure of the health sector, bringing out its peculiarities, with stress on those that influence cost. Similarly an analysis of income distribution is done at both regional and national levels with emphasis on the effects on the purchase of health care services. And based on the 1984 household budget survey, the paper estimates the proportion of income spent on health care. The paper then critically examines the different factors that are contributing to the increase of the cost of health care. Noting that some macroeconomic policies have increased the costs of health care as well as reduced the family's purchasing power. And using the concepts of need and demand for health care, the paper attempts to show the role of the medical personnel in managing health resources. Ways of raising household incomes are discussed but more so emphasis is on alternative ways of reducing the costs of health care. And reorienting the health care system from curative towards other forms of health care such as preventive and primary care.

Keywords : Cameroon, Health, Income distribution, Preventive care, Curative need and demand, Asymmetry information, GDP.

Résumé

Au Cameroun, le revenu par tête a fortement chuté depuis 1986. Il se trouve maintenant à un niveau équivalent à celui de 1980. Pourtant, le prix des services de santé a sérieusement augmenté. Ce Cahier présente la structure du secteur de la santé, mettant en valeur ses caractéristiques propres, notamment celles qui ont un effet sur le coût de production des services. Une analyse de la distribution des revenus, aux niveaux national et régionaux, est effectuée, afin de mettre l'accent sur la demande solvable de services de santé. En se basant sur les données de l'enquête de 1984, on fournit une estimation de la part du revenu consacré aux dépenses de santé. Enfin, ce Cahier examine, de façon critique les différents facteurs qui contribuent à l'augmentation des coûts. Il convient de noter que certaines des mesures de politique macro-économique ont augmenté le coût de la santé et réduit le pouvoir d'achat des ménages. L'utilisation des concepts de besoin et de demande de santé permet de montrer alors l'importance du personnel de santé dans la gestion des ressources sanitaires. Il en résulte une discussion sur les alternatives de réduction du coût de la santé, et, dans une moindre mesure, sur les possibilités d'augmentation du revenu des ménages. Dans tous les cas, la solution passe par une réorientation du système de santé vers des méthodes préventives plutôt que curatives.

Mots clés : Cameroun, Santé, Distribution des revenus, Soins préventifs, Demande curative, Information asymétrique, PIB.

Preface

The Cahiers of Ocisca is a regular series of working papers which presents the results of the surveys and studies undertaken by the Ocisca Program (Observatory of Change and Innovation in the Societies of Cameroon). All topics are related to the reaction and behavior of the various economic actors in the current context of economic crisis and structural adjustment. The research work on various issues of development such as the household standards of living, poverty and vulnerability, social innovation, the social impact of adjustment measures, the devaluation, the design of socioeconomic policies will be discussed in this series.

The Cahiers are designed to provide a medium for those who want to disseminate the informations collected in the various observatories and analyzed in the laboratories. They include the results of rapid surveys, the scientific analysis of survey data and also individual research work. The objective is to inform the policy-makers, and the main economic actors, of the on-going research work and, when feasible, to propose appropriate solutions for some of the issues that they have to solve.

It is within this framework that this issue deals with the problem of the relative cost of health care in Cameroon. In economic terms health care is essential to preserve the human capital needed for future development. In human terms it is also a way to ensure a personal better way of living and more harmony in the society as a whole. Until the beginning of the 90s the main health indicators like life expectancy at birth, infant mortality and crude death rate has regularly improved as the result of the public investment in health.

Since 1986 the government faced with the economic crisis has continuously reduced its total public spending since, between 1987 and 1993, the State budget decreases from 800 to 467 billion francs CFA. In the meantime the share of public expenditures allocated to health decreases from 5% to about 3%. With a growing population estimated at 12.5 million, and a decrease in the average households income that brings the level of poverty from 40% in 1983/84 to 60% in 1993 (and in urban areas from 2% to 30%), the country faces a challenge to preserve, at least, the benefits of its past policy, and, if possible, to improve the health indicators, even at a lower pace. Since 1994 the devaluation of the CFA franc increased the costs of drugs and equipment.

But with its 1992 Sectorial Health Policy Statement, the government confirmed his responsibility of ensuring health as a fundamental right to the population. Therefore appropriate solutions needs to be found to face this challenge of solidarity, equity and social justice. These will imply fundamental changes in the delivery of health care and drugs which lies in the hands of all the actors involved in the health sector.

Among the suggested solution one may quote the restructuration of the health sector in order to shift priority from curative care, delivered by hospital, to targetted preventive actions in rural areas or poor urban districts. A greater involvement of the private sector, including pharmacists, and the local communities may facilitate the delivery of less costly health services and medicine. The dissemination of few generic drugs, produced locally, as essential drugs is also a complementary alternative to the current import of specialised or more specific drugs. All these are a few ideas among others, but their effectiveness will rely on the capacity of all social actors, belonging to the public, private and informal sector, to work together for the design of a health policy adjusted to the current level of disposable resources.

Jean-Luc Dubois
Ocisca Manager

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Introduction

Cameroon's gross domestic production (GDP) has been declining since 1986. Economic performance significantly affects the level of public expenditure on health. The poor performance has forced the government to impose severe expenditure cuts on its activities particularly on the social sector which includes health and education. The rapidly growing population, estimated at 12 million, is also putting pressure on the existing and deteriorating health facilities and resources. The declining per capita income coupled with the rising price of health care services makes health care services unaffordable by an average Cameroonian. All these are imposing severe binding resource constraints on the health sector and negatively affecting the health status.

The achievement in the health sector are generally reflected in some key health variables such as life expectancy at birth, infant mortality and crude death rate (Table 1). Prior to 1987 the improvement in these key indicators was dramatic. But since then life expectancy has almost stagnated at 56 for the past two years. Infant mortality has almost not fallen since 1992. The crude death rate has remained the same since 1989. There is therefore all indication that the health status is deteriorating mainly because of the current economic and political situation. These indicators may continuously get worse unless remedial actions are taken soon.

Table 1 - Some Key Health Indicators

	1976	1980	1987	1989	1991	1992	1993
Life expectancy at birth (years)	47.6	51	53.4	55	55.7	56	56
Infant mortality (per 1000) live births)	102		86		66	60	58
Crude Death rate (per 1000 people)	20.4	15	13	12	12	12	11

Source : PNUD 1993, and, African Development Report 1994, African Development Bank, Abidjan.

In the rest of the paper we shall carry on the discussion as follows : public expenditure situation is discussed in section 1, followed by an analysis of income distribution and the declining per capita income, showing its effects on the demand for health services in section 2. Section 3 focuses on the organization of the health section bringing out its expensive and ineffective components. Further implications of curative care on cost is discussed in section 4. Section 5 looks at the role of the medical professional in determining the resources in health care. In section 6 we briefly look at the government health policy and then concluded with some suggestions in section 7.

1. Expenditure Cuts and Service Reduction

Since 1986, the government has continuously reduced its total public expenditures. Between 1987 and 1993 the budgetary expenditures were reduced from 800 to 467 billion francs CFA (Tables 2 and 2.1). This is over 71% reduction; consequently the share of health expenditure in total expenditures has also been reduced.

Table 2.1 - Total Public Expenditure (current billion francs CFA)

Year	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93
Amount	800	650	600	600	550	572	467

Source : Finance Bill of the Republic of Cameroon for the 1993/94 and 1994/95, financial years and Cameroon figures 1990.

Table 2.2 - Expenditures on Health (billion francs CFA)

1989/90	1990/91	1991/92	1992/93	1993/94
-	-	27.2	23.8	24.3

Source : Finance Bill of the Republic of Cameroon for 1993/94 and 1994/95.

In 1990, the health expenditure was just above 5% of the total public expenditures but since then it has been reduced to 3.1% level (Table 3). It has also been reduced sharply in absolute terms. This is by far below the level of 10% recommended by the World Health Organization, worse if this is seen in real terms.

Table 3 - Government Expenditure on Health and Education (%)

	1989/90	1990/91	1991/92	1992/93
Education	10.7	27.7	27.8	33.3
Health	5.1	3.1	3.3	3.2

Source : Ministry of Finance, Budget Division, and IMF estimates, 1994.

The poor performance in the health sector in terms of public expenditure has partly been due to the poor economic and political situation. The government obtains its income mainly from the general tax revenue which includes taxes on exports and imports. A negative growth since 1986 has reduced the government's revenue consequently expenditures.

In principle, a temporary cut in investment expenditure may not have immediate effects but a reduction in current expenditures such as on salaries, drugs and basic medical supplies and hospital services immediately reduces health care services. This is just what is happening in Cameroon's health care delivery system where both investment and recurrent expenditures are being reduced. Furthermore, the expenditure reduction which is not temporary seems to be negatively affecting the rural areas more than the urban areas. Reducing the public sector deficits through cuts and introduction of fees into government provided services have increased the cost of health care services to the consumers of these services. The end result is deterioration in health outcomes (see in Table 1).

The reduction of the health expenditure erodes the public commitment to the improvement of the health care services particularly to the poor and vulnerable group of the society. This means also the shifting of the financing of health care to the individual which poses some problems particularly those of equity and effectiveness, because of general reduction of income level and concentration of income in fewer hands.

2. Level of Personal Income by Region

In real terms the per capita income has fallen sharply for the last three years. In 1993 workers in the public sector (the largest formal employer) witnessed two salary cuts. In January 1993, the cut was up to 20%, and in November, the same year, the cut was up to 80%. Prior to this, more than 46,000 workers had lost their employment. Since the private sector has also been contracting, the level of unemployment has increased. In the rural sector the traditional export crop producers have also witnessed a sharp fall in their income partly because of fall in World prices and arrears owed them, although recently nominal prices have increased.

Then in January 1994, the CFA franc was devalued by 50% relative to the French franc. This has contributed to the increase of the general price level. Consequently the overall purchasing power has declined with the per capita income today falling to less than the 1980 level of 209,000 francs CFA (PNUD 1993) in nominal terms. Some estimates put it at much lower level of 140,000 francs CFA. As the economic crisis deepens, the level of poverty increases, many people become poor or vulnerable. Inequality in income distribution has increased. For example in Yaounde the GINI coefficient was 0.49 in 1984 and in 1991 it has increased to 0.66 (PNUD 1993). This reflects the national trend of increased inequality and reflecting increased level of poverty. Hence fewer persons are able to afford health care services which have also become expensive.

As the economy contracts, personal income too shrinks resulting to reduction in the consumption of goods and services including health care services. So the poor would be unable to afford health care.

To appreciate the situation more we briefly discuss income and expenditure by regions. The Cameroon's provinces reflect the major agro-ecological zones which produce the major traditional export crops and varieties of food crops. From Table 4, the cocoa, coffee and palm oil producing region of South West and Littoral has the highest income followed by the cocoa and tobacco producing region of Center, South and East provinces. The cotton and livestock producing region, of the Northern provinces, has the lowest income level per household. The household expenditures are much higher than the income levels mainly because income is derived from other sources other than from the traditional export crops. For example, Yaounde and Douala have very high expenditures. The households are involved in high earning nonagricultural activities; consequently the income of an average household in these two towns is much higher than that of the rest of the country, so too would be their expenditures. But less than 20% of the population live in these towns.

Table 4 - Regional Income and Expenditures

Region/crops	Average Farm Income	Household Expenditure
Center, South East (Cocoa and Tobacco)	285 459	457 353
Northwest, West (Coffee)	231 476	403 136
North, Adamaoua Far North (Cotton, Livestock)	193 111	357 398
Southwest, Littoral (Cocoa, Coffee, Palm oil)	441 807	426 835
Yaounde	NA	1 577 150
Douala	NA	1 384 859

Source : Based on 1989 Socio-economic Development Support Project for the Republic of Cameroon, World Bank.

The situation is similar as seen from Table 5 where the average per capita expenditure is highest in Yaounde and Douala, and lowest in the rural North of the country. In terms of expenditure on health services we observe that the Northern part of the country spends much less than the Southern part both as a proportion of the total household expenditures and in absolute level. In general there is indication that the Northern part of the country is not as rich as the Southern part.

Table 5 - Share of Health and Education Expenditure in Total Household Expenditures by Regions

	Yaounde	Douala	North Semi-Urban	South Semi-Urban	North Rural	South Rural	Cameroon
Percent of households expenditure							
Health/serv-ices	7	7	5	8	2	7	6
Education	4	4	1	5	.05	3	3
per Capita expenditure (1000 CFA frs)							
	455	380	218	161	99	114	152

Source : Based on *Income Distribution, Poverty and Consumer Preferences in Cameroon* by S. Lynch table 3.7, 1991, and 1983/84 Household Budget Survey in Cameroon.

We can also look at the situation through income distribution by quintiles (see Table 6). In each quintile there are 20% of the households starting from the first (1) which has the lowest income to the highest income group (5). Nationally a household spends 6% of its budget on health which is the same percentage shown by the first quintile. As income falls the proportion of income spent by the poor on health may increased, therefore leaving little or nothing to be spent on other basic necessities. Some studies (Behrman 1988, Scobie 1989) show that as income declines households tend to reallocate their resources from "inefficient health and health related inputs to more efficient ones". The situation differs in Cameroon where the poor and vulnerable segment of the society tend to acquire poor health inputs as their income declines and thus obtain inefficient health inputs.

Table 6 - Share of Health Expenditures by Income Group per Capita Income (quintiles) (%)

	1	2	3	4	5	6
Health/services	6	5.0	5	5	6	6.0
Education	3	3	3	2	3	3
Value of expenditure (1000 CFA)	36.7	64.3	96.0	148.7	425.9	152.0

Source : Based on *Income Distribution, Poverty and Consumer Preferences in Cameroon* by S. Lynch table 3.7, 1991, and 1983/84 Household Budget Survey in Cameroon.

Declining income means health is badly affected basically through an overall reduction in demand for health inputs. Families or households tend to cut down expenditure on health related

items such as drugs, fees for medical attention. When the spending unit is already at the subsistence level any additional reduction in income may mean a further reduction in expenditure on food resulting in the increase susceptibility to disease.

The little responsiveness of quantity of health care demanded to large changes in income may push poor individuals into heavy debt when they are sick. The opportunity to borrow may not exist such that they may have only one option - deny themselves treatment with severe consequences.

3. The Health Sector Organization

Health care is so varied that it is difficult to categorize by the different health care services. Health care here may include individual health care, the provision of drugs, disease control, provision of health facilities and services as well as those services and goods indirectly related to health such as sanitation and water supply. Cameroon's health care is provided by the delivery system that range from rural health centers or districts to urban modern hospitals. In the public health care sector, health centers are established at both village and district levels. There are subdivisional and divisional hospitals with maternity and hospitalization facilities. At provincial level there are more specialized and better equipped provincial hospitals. More recently, two reference hospitals have been built in Douala and Yaounde. These highly specialized equipped hospitals took more than proportionate share of the health sector's investment budget especially in 1987/88 financial year. In general the government has shown a bias towards hospitals. This pyramid system is run by trained personnel. But in general the numbers of persons per doctor (12,600) or nurse (2,064) are still very high, showing inadequate number of medical personnels. There are many problems in this system. One of the major problems of the system is that the health personnel is concentrated in the hospitals serving the urban and semi-urban areas. The rural areas as well as some provinces, are poorly covered; for example, in the Far North there are 100,000 persons per hospital while there are 30,000 in the South (PNUD 1993). The construction of hospitals has slowed down almost to a stop, but the population continuous to grow thus worsening the situation.

The private sector health care system is quite important. The religious missions health and non-profit groups play a very important role in delivery of health care services. The traditional healers are important but their number and operations are not well known. There is a very weak link between the public and private health care systems. This weakness is very pronounced when one looks at the traditional health care services which utilize all the local resources and rely on the community to meet health care needs. The traditional health care is more accessible and affordable to many now. The traditional healers tend to be more holistic in treating their patients very much unlike the modern health care provider. The quality and the organization of the traditional heals is another issue.

Another problem is that the health care system seems to put more emphasis on curative care. It is estimated that curative health care accounts for more than 65% of the total health care budget. Also the wage bill carries the greater bulk of the operating cost of the health budget. Certain measures seemed to have been taken to control the personnel cost, yet not much has been achieved as can be seen in Table 7. The major problem may be that of equitable distribution of personnel and improving the quality of care and personnel.

Table 7 - Expanded and Budgeted Health Personnel Cost as a Percentage of Total Operating Costs

	1990/91	1991/92	1992/93	1993/94
Expanded personnel cost	19%	87%	88%	80%
Budgeted personnel cost	84%	80%	83%	-

Source : Ministry of Public Health 1994.

4. Curative Care and Cost

It is crucially important to further look at the implication of hospital based curative care system on cost. First this type of care takes vary large share of health expenditure in Cameroon similar to many African countries. In Cameroon's 1986/87 budget year, more than 80% of the health care budget went to hospital consumption. In the 1987/88 budget the situation was more glaring with 92% of health investment budget going to the construction of major hospitals in two towns of Yaounde and Douala (World Bank 1989). Although the bias is more pronounced in Cameroon; many African countries seem to do the same. Kenya between 1985 and 1991 allocated over 70% of its health budget to curative care. Malawi allocated 82% between 1981 and 1988. Uganda spent over 50% of its health budget on curative care of its ten major killers and causes of morbidity. These were all hospital based expenditures (World Bank 1993). It is interesting to note that greater part of this spending would have been saved if emphasis were on other type of care particularly on preventive and primary care. So the problem is more that of allocation of resources than of lack of funds.

The government does pool, control and allocate public resources to health sector. Yet the poor showing as indicated by the proportion of health budget and its allocation demonstrate weak government commitment to spending on health. The government has the means to help make substantial improvement first in public expenditures on health, and second, within the sector to reallocate more resources to preventive and primary health care. This kind of care have some feature of public goods and externalities. For example, "a wide-area control of disease vectors and radio based health information" drive would benefit individuals as well as the community as a whole excluding nobody. But this pure public good can only be provided by the government or through the government. Also there are certain services provided at relatively low cost to the population such as increased immunization which have substantial externalities. Cost of prevention would be much lower then when such intervention were not made and the end results were to be that of curative nature.

Furthermore curative care involves much drugs and medical supplies. Pharmaceuticals are the largest component above 30% of the recurrent cost after personnel costs in Cameroon health care recurrent budget (World Bank 1992). This was much more before the late 1980's. Recently much of the increased cost of drugs had been passed to patients. The price of drugs have been increasing and, since January 1994, the prices have been more than doubled (Table 8). Households are forced to cut down their medical expenditure. In 1981 it was estimated that households spent 100 billion francs on drugs and eight years later the expenditure is 66.5 billion francs CFA. Almost all drugs are imported in Cameroon and so many factors affect the availability and price of pharmaceuticals. But the most important factor affecting the price of the pharmaceuticals has been the January 1994 50% devaluation of the franc CFA relative to the French franc. This increased prices of imported goods and in the case of drugs, prices rose by more than 200% (Table 8). This

sharp increase coupled with the drop in per capita income or household income has far reaching negative consequences for the poor households.

Table 8 - Price Index (1985 = 100)

	1980	1988	1989	1990	1991	1992	1993	1994
Consumer Price Index	55	124	121	124	126	128	130	-
Drug Price Index (2)					130	136	141	286

Source : African Development Report Table 34, (2) Our calculation.

5. Asymmetry Information and the Medical Professional's Role

Unlike most services, where the consumer determines the nature and extent of the services provided, health care services are determined by the provider. This is derived partly from the patients's reliance on the medical professional whose diagnosis determines the extent to which the patient requires the health care services in terms of medical or diagnostic tests, drugs or hospitalization. Here the medical professional is the decision maker and not the patient.

Often the patient does not know the likely outcome and cost of possible treatment to be able to choose between costs and gains - if the patients can do that. The medical professional general have more knowledge than the patient. This means that the medical professional provides the medical services as well as decides the type of services including the resources to be used. Furthermore the patient may be in a situation that the medical professional makes all the decisions even without taking into consideration the element of cost. Hence the medical professional has a very important role in managing health care resources particularly when faced with complex issues of efficient allocation of resources and cost.

The concept of need besides having the idea of professional need, it also implies what a medical professional thinks one ought to have as well as what one cannot afford because one is poor. This idea is therefore in sharp contrast with demand which implies that an individual makes informed choices based on his/her preferences and ability to pay for the choice made.

The idea of need becomes necessary because of limitations of demand as an allocative principle. The effective demand is closely related to income and to the distribution of income. Demand is therefore not equalitarian; because, the poor would get very little while the rich would get most of the medical care if the distribution of health care followed the demand concept. It is therefore a major concern that a large proportion of Cameroon's population has very low income such that it cannot even afford the bare minimum of health care as identified by the World Health Organization or the medical profession as need.

6. Health Policy Statement

The December 1992 Sectorial Health Policy Statement in which the government talks of maintaining its responsibility of ensuring the health of the population - the fundamental right of any individual and ensuring solidarity, equity and social justice in health, should be regarded as a powerful policy statement. But it is doubtful if that could be back by the necessary resources. The economy is weak and the government is unable to undertake such an equalitarian project despite its importance.

However external assistance (Table 9) to health, population and nutrition has been increasing over the years and national efforts are now being intensified. Since Cameroonians for long have been paying for their medical services and drugs. The major difference now is that the poor cannot afford the high cost of medical care. Yet the cost recovery principle and management decentralization at local level may generate income particularly at the rural community level.

Table 9 - Donor Commitments to Health Care and Population Nutrition (in million francs CFA)

	1990/91	1991/92	1992/93
Multilateral (excl.) (IDA) (WHO, UNICEF, UNFPA, EEC)	64	342	1,147
Bilateral	2,121	4,884	7,010
NGO	826	1,042	1,226

Source : Ministry of Public Health 1994.

Previously nearly all revenues collected were put into the general treasury. According to the 1990 and 1992 laws the situation is gradually changing. The local health centers are allowed to retain income from their activities while the hospitals retain 50% of their revenues. This cost recovery programme is being introduced in various ways within the context of sharp decline in per capita income. It is important that management particularly financial management be drastically improved; and different ways must be sought to improve management at all levels.

Conclusion

Cameroon government has spent a disproportionate share of health expenditure on curative based sophisticated hospital care of low cost - effectiveness and little on preventive and public health services. Now different ways are sought to raise revenue for health care partly through the promotion of cost recovery programme at different levels of the health delivery system. But this is done within a socio-economic context when the purchasing power of the population concerned is eroding.

Hence the different related ministerial department (such as Ministry of Agriculture) must find different ways of increasing the population's production as well as productivity. Income must be increased in order to meet the increased cost of health care. When personal income increases, the national income too increases consequently more people can afford medical care and more can be spent on Health Care.

The health care system has to strike a balance between the curative hospital based health care with other types of care in order to reduce both short and long run cost of health care. The medical school (including nursing schools) have put little emphasis on the management of resources. The training could put more emphasis on resources management (starting at the individual level) and reorient training towards more stress on primary and preventive health care.

Greater link and collaboration could be established between the private and public health systems both for mutual and social benefits. There is absolutely much room for cooperation. For example the medical profession including pharmacists could learn from the traditional healers who use local medicinal resources particularly plants for their treatment while the traditional healers could improve on their healing methods through scientific methods. Such collaboration could result also to finding different ways of producing drugs locally at much lower cost to the patient.

By all means the main objective for those concerned is to find different approaches of maintaining good health at minimum cost.

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