Review Article

Privatization of the Sudanese Central Medical Supplies Public Corporation: Why not?

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Abstract

In Sudan, the constitutional guarantee to free medicines in the public health facilities was abolished in 1992 as a part of health sector reform, which was adopted as a component of economic liberalization policy. The Central Medical Stores (the government agency responsible for free distribution of medical supplies to public health facilities) was converted to an autonomous public organization and renamed Central Medical Supplies Public Corporation (CMS). Since that time, CMS started the distribution of medicines and medical devices to all public health facilities on a cash-and-carry basis. This paper provides information about CMS and medicine supply system in Sudan. It also highlights the reasons and potential advantages of the CMS privatization. The paper concluded that, the best way forward to reach all corners of a huge country, like Sudan, was to privatize the ownership of the CMS. This action will render the new company to provide the current services more efficiently and cost-effectively.

***Keywords**: CMS, privatization, medical supplies, state owned enterprises, efficiency*

Introduction

The privatization of public owned enterprises has become an increasingly critical and urgent issue in many developing countries. It is viewed by the World Bank as a means to increase efficiency of both government and business [1]. In line with Sudan government's commitment to encourage privatization, as an initial step, Federal Ministry of Health (FMOH) has privatized certain non-medical services in hospitals, such as catering services, security and cleanings. The medicine financing was privatized in the early1990s. Currently, FMOH has prepared new policy for privatization of federal hospitals administration and financing. The government has very rich experiences in privatization of public organizations. For example, telecommunications, Sudanese free zones and markets, and very recently the Bank of Khartoum. These experiences provide good lessons about the efficiency and effectiveness of the privatization policy.

There has been considerable published work (theoretical and empirical) on the privatization of government owned enterprises [1-8]. This literature concentrates mainly on the reasons why various governments privatized previously public owned enterprises; the impact of privatization on the social welfare; the extent of privatization success; the possible reasons for the failure of different privatization methods and the role of the World Bank in the privatization, particularly in developing countries; and political struggle among interest groups involved in the privatization [8-18]. But, the data on the impact of privatization of public medicine supply systems on the distribution costs and its efficiency is scarce. To our knowledge, there is no empirical evidence to allow us to make judgment that the privatization of CMS will worsen the accessibility to essential medicines. The only evidence that we came through is from Malaysia [17,18]. However, these studies assessed the impact of privatization of Malaysian National General

Medical Stores on medicine prices. Our study seams to be the first of its kind that gives detailed information about how to privatize a public supply organization. This paper is based on a review of the published literature and several types of documents, and working papers. It presents a proposal for privatization of the CMS as an option available to policy-makers. The privatization of CMS is advocated for as the option that will lead to efficient use of resources previously utilized in a less than optimal manner. The possible effects and side effects of CMS privatization are described based on the experience from different countries. We are confident that, having read this paper, you will share our belief that the proposed privatization of CMS offers significant opportunities to both the public and private organizations. We also thought that the proposal will help many politicians, policy-makers, patients and other organizations in developing countries with similar situation to privatize the ownership of their public medicine supply organizations. In this proposal, section 2 discusses the method we have used to write this proposal. Section 3 defines privatization of state owned enterprises. The section also presents the privatization policy of the government of Sudan. This includes the medicines financing reform of 1992. In section 4, we present a situational analysis of the current medicine supply system depending on literature review in the field and our personal experience. Section 5 presents aims and objectives of the privatization of CMS. It also answers the question: why changing the ownership will improve the performance of CMS. After making strong case for privatization of the CMS, section 6 presents different strategies that could make the privatization of CMS successful. Section 7 suggests further involvement of the FMOH to ensure the availability and proper use of medicines, particularly in public health facilities. . Finally, the paper ends by giving brief summary and conclusion.

Method

In order to write the proposal for privatization of Sudan’s CMS, we reviewed literature on privatization of state owned enterprises and unpublished reports and studies of government regarding the CMS. We also collected some information through E-drug, an e-mail conference dealing with pharmaceutical topics. In addition, a review of the existing literature on medicine supply management system was conducted. To review the literature published on this topic, we first screened the computerized databases of the World Health Organization (WHO), the World Bank, PubMed, Medline, newsletters, LLR electronic sources for relevant journal articles describing the impact of privatization of state owned medical supplies organizations using searching words: privatization, state owned enterprises, medical supplies; pharmaceutical organizations. We ended up with more than 550 articles. Unfortunately, only two articles are about the impact of the privatization of public owned medical supplies organizations. The remaining literature is generally about reasons, impacts and theories of the privatization of state owned enterprises as mentioned above.

Privatization of public enterprises: what does it mean?

The term privatization has generally been defined as any process that aims at shifting functions and responsibilities, in the whole or in part, from the government to the private. In broader meaning, it refers to restrict government's role and to put forward some methods or policies in order to strengthen free market economy [5]. Privatization can be an ideology (for those who oppose government and seek to reduce its size, role, and costs, or for those who wish to encourage diversity, decentralization, and choice) or a tool of

government (for those who see the private sector as more efficient, more flexible, and more innovative than the public sector) [2,3]. Scarpaci [4] contends that "the invisible hand of the market is more efficient and responsive to the consumer needs and that public administrative budgets consume large portion of tax monies that could otherwise be used for service delivery". The emphasis is on improving the efficiency of all public enterprises, whether retained or divested.

Privatization may take many forms [2,6] including:

- The elimination of a public function and its assignment to the private sector for financial support as well as delivery (police, fire department, schools); opponents characterize this as "load-shedding" [19];
- Deregulation, that is, the elimination of government responsibility for setting standards and rules concerning a good or service [20,21];
- Assets sales, that is, the selling of a public asset (a city building, a sports stadium) to private firm;
- Vouchers, that is, government-provided or –financed cards or slips of paper that permit private individuals to purchase a good or service from a private provider (food stamps) or a circumscribed list of providers;
- Franchising, that is, the establishment of a model by the public sector that is funded by a government agency, but implemented by approved private providers;
- Contracting, that is, government financing of services, choice of service provider, and specification of various aspects of the services, laid out in a contract with a private-sector organization that produces or delivers the services;
- User fees, that is, public facilities, such as hospitals, maximize their income or finance some goods from private sources, either through drug sales or other services. This kind of privatization is applied in Sudan since the early 1990s, as a health financing mechanism, especially for medicines.

Sudan's privatization policy

In Sudan, the government has decided to distance itself from direct involvement in business, and thus to divest most of its interests whether in loss-making or in profit-making public enterprises. The public reform program is set firmly in the context of the broader reforms (widely known as the economic liberalization policy), which were introduced in 1992, after it had become clear that previous policies had delivered very disappointed results. This reform based on the transfer to the private sector of activities vested with government. It signaled the government intention to reduce its presence in the economy, to reduce the level and scope of public spending and to allow market forces to govern economic activities. The privatization policy goal is to improve the performance of companies that have been in the public sector, so that they contribute more to the growth and development of the economy, while doing so in such a way as to broaden ownership and participation in management, and to stimulate domestic and foreign private investment. The following are the primary objectives which have been defined in the government's policy statement on public sector reform:

- Improve the operational efficiency of enterprises that are currently in the public sector by exposing business and services to the greatest competition, to the benefit of the consumer and the national economy;
- Reduce the financial and administrative burdens of public enterprises on the government's budget by spreading the shares' ownership as widely as possible among the population;

- Expand the role of the private sector in the economy, permitting the government to concentrate public resources on its role as provider of basic public services, including health, education and social infrastructure to mitigate the side effects of the privatization;
- Encourage wider participation by the people in the ownership and management of business.

In pursuing these primary objectives the privatization policy aims to transform, through commercialization, restructuring and divesture, the performance of most significant enterprises in the public sector and ensure liquidation of all viable and non-viable public enterprises as soon as possible. Public sector reform efforts are thus aimed at reducing government dominance and promoting a larger role for the private sector, while improving government's use of resources. Movement towards these goals in some countries is supported by components of a structural adjustment loan, which helped initiate the program and establish the legislative and institutional base. However, opponents argue that, the original objectives of state ownership were to ensure that the corporate sector of the economy was in national hands rather than being controlled by either foreign investors or the minorities that enjoyed business dominance upon independence. A further objective was to use investment in state firms to accelerate development in a situation in which private sector was reluctant to take risks.

In Sudan, the privatization of public owned enterprises started by liberalization of local currency, foreign exchange transactions, internal and external trade, prices and health services. In this regard, user fee as a financing mechanism for medicines and other health care services was introduced in all public health facilities throughout the country [22]. It was seen as a solution to generate and free resources for the health care system in order to stop the run-down of health services [23]. This reform had led to greater reliance on individual initiative and corporate accountability rather than on government as a decision-maker on business matters. The medicine financing was privatized early in 1992 by adoption of user fees policy. Since then, health system in Sudan is characterized by heavily reliance on charging users at the point of access, with less use of prepayment system such as health insurance. According to WHO, private expenditure on health is 79% [24]. It must be emphasized that through privatization, government is not evading its responsibility of providing health care to the inhabitants, but, merely shifting its role from being a provider to a regulator and standard setter.

The strategy of price liberalization and privatization had been implemented in Sudan over the last decade, and has had a positive result on government deficit. The investment law approved recently has good statements and rules on the above strategy, in particular to health and pharmacy areas. The privatization and price liberalization in health fields has ensured availability and adequate pharmacy supplies in the private sector. It also effects increase in the number of medicine importers, manufacturers and retail distributors. For example, the number of the pharmaceutical importing companies, local manufacturers and community pharmacies increased from 77, 7 and 551 before privatization policy [25] to respectively, 283, 24 and 1,422 in 2005 [26].The number of registered medicines in Sudan was also increased to nearly 3,000 in 2005 [26]. The result is that, the present situation of pharmacy services is far better than ten years ago.

Public medicines supply system: situational analysis

In Sub-Saharan Africa countries (Sudan is not exceptional) discussions about medicine distribution system reform have centered on ways

to improve sustainability and quality of access to essential medicines. These discussions also include debate on the impact of privatization of public drug supply organizations on effectiveness, efficiency, quality and cost of medicines in the public health facilities, as well as on the respective role of the public and private sectors [27].

Until the mid 1980s, governments in Africa assumed responsibility for providing medicines to the population, in some countries, such as Mali and Guinea, private distribution of all medicines, including aspirin was illegal [28]. In many countries, there were two parallel government distribution systems- the public health network of hospitals and health centers, through which drugs were distributed gratuitously, and public sector pharmacies, at which the medicines were sold to the public at subsidized prices.

During the 1990s, Sudan initiated a number of initiatives to establish drug financing mechanisms as a part of the health reform process and decentralized decision-making at state level. The Central Medical Stores procured and distributed free medicines and other medical supplies to public health facilities since 1937 until 1991, when a law was passed that medicines are not anymore free-of-charge (i.e. privatized) in public health system. The aim of the government is to increase equitable access to essential medicines, especially at states' level. As a result Central Medical Stores, which was responsible for medicines supply system of the public health facilities, became an autonomous medicine supply agency, and renamed as Central Medical Supplies Public Corporation (CMS) and operated on cash-and-carry basis [29]. The role of the CMS is to provide public health facilities with cost-effective medicines through tenders in which the private companies offer their competitive bids [30]. To achieve its objectives, the CMS was capitalized and an executive board was installed. Since that time, it implied that states and federal hospitals have to buy their own medicines and other medical supplies from CMS and organized their own transport means and distribution to their primary health care facilities and hospitals. The CMS is the sole distributor of medicines and medical supplies to public health facilities. Although it is important to operate on a reasonable profit margin (35%), but the CMS enjoys monopolistic powers and in reality charges, on average, 248% mark-up on cost [31]. This enormous profit can lead to increased medicine expenditure, which in turn constrains access to essential medicines in public health facilities. For example, in 2005, the CMS commanded a 14% share of the US$269 million of Sudanese pharmaceutical market (Table 1). This is due to the exploitation of monopoly and breaking of pharmaceutical regulations, such as selling of non-registered medicines† even to private pharmacies [30]. Thus, the CMS would not be was it not protected at the expense of more productive alternative uses of the public resources being employed.

Despite health sector reform, the public medicine supply system has not been working; throughout Sub-Saharan Africa, including Sudan, one finds serious shortages or no medicines at all, particularly in rural areas. One study in Cameroon found that rural health centers received only 65% of the stock designated for them and that another 30% of the medicines that arrived at the centers did not reach the clients. The loss rate after arrival in hospitals was estimated at 40% [32]. In Sudan, Graff and Evarard [33] who visited the country on a WHO mission, reported that:

† According to the Pharmacy and Poisons Act (2001) all medicines should be registered by the General Directorate of Pharmacy to get marketing approval. Each manufacturer or medicine importer must present extensive information on the product (or products) submitted for registration, to allow qualified assessment teams evaluate the quality, safety and efficacy of medicines before marketing authorization is given.

Table 1: Sources of medicines and medical supplies in Sudan

Sources	Amount in US$ (million)	Percentage*
Wholesalers (importers)	107	40%
Local manufacturers	46	17%
CMS	37	14%
Revolving Drug Fund, Khartoum State Government	2	1%
Donations	77	29%
Total	**269**	**101%**

Source: GDOP statistical report [26].

* The total of these percentages does not equal 100% due to rounding of figures.

Although the cash-and-carry system took off well, lack of sufficient foreign exchange hampered CMS procurement activities and resulted in low stock levels of all medicines and even stock out of life-saving products. Hospitals had to purchase medicines from elsewhere and often had to buy from private sector. Overall hospitals' budgets were tied to allocated drug budget and sales income was not sufficient to cover the purchase of needed medicines supplies. This resulted in that, most of the time medicines were not available and in- or outpatients with their prescriptions were directed to the private pharmacies.

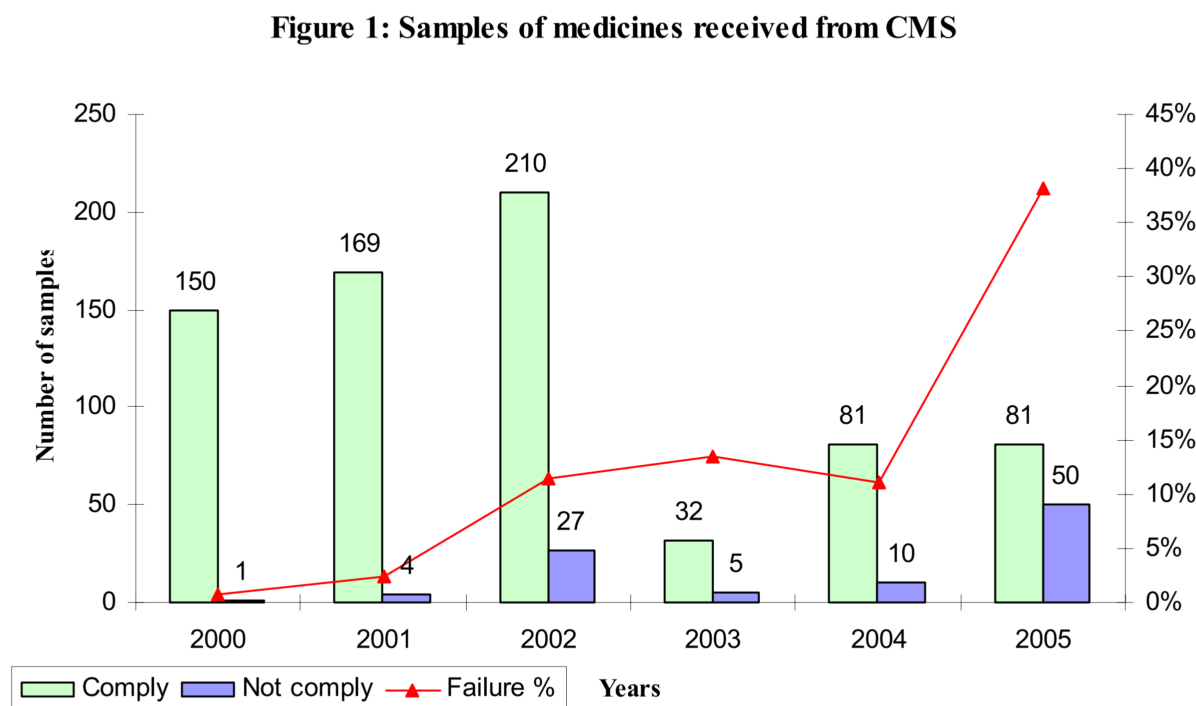
In 2003, Khartoum Teaching Hospital (the biggest hospital in Sudan and less than 5KM from CMS) had medicine stock of only SDD83 (US$ 31). This is why it is common practice in public health facilities that patients or their relatives are given prescriptions to buy all pharmaceutical supplies that are needed, including medicines and other disposables from private sector pharmacies. A recent study conducted by the GDOP [31] found that availability of essential medicines in public health facilities was only 51%. The shortage of life saving medicines is frequently reported in the national press [34]. As a result, there was expression of concern from many sectors, including FMOH. In response to this abnormal situation, the FMOH established a new department to supply the federal hospitals in Khartoum state with essential medicines. The existence of two public supply systems confuses donors. For instance, one of the donors suspended its huge donation of medicines to fight HIV/AIDS, tuberculosis and malaria until the picture is cleared.

CMS's samples of imported medicines have been tested by the National Drug Quality Control Laboratory (NDQCL) ‡, with an average, 12% failure rate during the last six years. However, 38% of the samples tested for approval failed the quality test in 2005 [35]. Moreover, although the medicines imported by the CMS increased from US$10 million in 2000 to US$ 37 million in 2005, the number of medicine samples (the available data were presented in figure 1) sent to the NDQCL was sharply reduced from 237 samples in 2002, to only 37 in 2003. However, the number of samples steadily increased but never returned to the 2002 level. More seriously are the findings of a recent post-marketing quality testing study conducted by the NDQCL [36]. This study reveals that 35% of the CMS's samples collected from pharmacies failed quality tests. These data confirmed the concern expressed by policy-makers and health care professionals that the CMS medicine sources pose a number of quality issues [34]. The focus is now very much on procuring cheap non-registered medicines regardless of the reputation of sources [30]. The CMS breaks the Pharmacy and Poisons Act [31] by only relying on their own quality control laboratory. The post-marketing testing on CMS products proves the failure of the CMS self-quality control testing system§.

‡ The national governmental authority responsible for quality control testing of medicines.

§ In 2003, the CMS started testing medicines in its own quality control laboratory since.

Figure 1: Samples of medicines received from CMS



Source: Alfadl [35].

Many ministries of health, services providers and researchers have identified characteristics that lead to poor performance in Sudan public medicine supply systems. These characteristics include:

- *Absence of competition*: competition is the best way to ensure that goods and services desired by the consumer are provided at the lowest economic cost. Given the customers (i.e. public health facilities) freedom of choice enables market forces to provide sustained pressures on companies to increase efficiency. Privatized companies generally operate in a competitive market environment;
- *Insufficient funding*: for example in Sudan with exception of Khartoum, Gazera and Gadarif states, all states have no enough funds to establish efficient medicine supply system. In spite of being profit making organization, CMS failed to avail such funds during the past 15 years;
- *Inefficient use of available resources*: CMS since it was re-shaped in the early 1990s works as a profit-making organization. Due to the absence of prioritization, CMS engaged in an installment of repackaging joint venture pharmaceutical factory in 1999 and recently announced its commitment to build a pharmaceutical city with not less than US$90 Million, despite the lack of life-saving medicines in the public health facilities. Such amount could be sufficient to establish a reliable supply system for all states of Sudan. This lack of prioritization is a typical symptom and sign of most of public organizations. This, in addition to selling of medicines to the private pharmacies are seen as serious departure from the initial purposes of public supplies as a service provider and not a greedy profit-making organization that utilizes the government concessions to beat the private taxpayer business sector [30].

- *Poor management*: there are a number of constraints inherent in operating government medicine supply service. These constraints comprise:
  - Civil servants are hired, rather than persons with business experience and skills. Managers confront different challenges in public setting. They are not easily hired or fired. This lack of accountability results from the lack of shareholders, who would be free to remove incompetent administrators;
  - Even if the services can recruit outside of civil service, the wages are often too low to attract experienced managers. In addition, the managers do not share in dividends or other monetary activities as do private managers and incentives for doing well are often attenuated in a bureaucracy;
  - There are cultural and structural conditions that promote corruption, including enormous pressure of wages earners to support an extended family and a strong incentive to earn more than their fixed government wage, traditional gift giving practice and a proprietary view of public offices [38].
- Even in the absence of broader adjustment context, however, it has long been clear that CMS reform is needed and indeed is not avoidable. Patients, administrators (at both hospitals and ministries of health), doctors and other health care professionals, the regulatory authority and others are being fully aware that the performance of CMS is so poor and ill people are really suffering even after the privatization of medicines financing in 1992. Although it is profit-making organization, neither the Ministry of Finance nor FMOH is getting proper or even any returns from the CMS. Instead the Ministry of Finance after more than 14 years still have to inject annual money to cover the cost of certain budget lines, such as free medicines projects.

After 15 years since the CMS has been converted to autonomous public organization, the government needs to think of more cost-effective alternative to ensure access to quality medicines of affordable prices in its public health facilities. The following are main three justifications which summarize the inefficiency of CMS as a public organization:

- There is widespread dissatisfaction with the situation of pharmaceuticals in public facilities. For instance, despite 79% of the population [24] pay for their medicines out of pockets, the access to essential medicines in Sudan is still less than 50% [29]. Indeed CMS should have an impact to decrease medicine prices, but it seems to be the reverse. The study of GDOP reveals that the overall mark-up of CMS on medicine costs was 248% in 2005 [31]. This despite the fact that the availability of affordable quality medicines is one of the National Medicine Policy components. The control of medicine prices is also clearly stated in the Pharmacy and Poisons Act [37]. The alarming findings of the GDOP's study have indicated the need for urgent action. The CMS always claims that any action to control its prices or quality is driven by the private pharmaceutical competitors and if allowed, it would hamper its performance and endanger the public health. However, as we discussed earlier, the facts do not support the claims of the CMS. The GDOP's study [31] showed that the continuing resistance of CMS to be under the control of the regulatory authority led to escalating prices and to distribution of low quality medicines.
- Yet, the cost has been immense and is continuing. There is no satisfactory estimate of the total capital invested in the CMS. Rather than receiving a sustained flow of dividends

from its investments, the Ministry of Finance is still financing the free medicines and certain diseases drugs. The CMS pays very little to health services since it was established in 1991. Instead, the strong stream of dividends and tax revenues, which should support public spending on other health activities, is lost, and it is the poor who suffer as a result.

- Violation of pharmaceutical regulation, at the expense of the public health, by selling non-registered medicines creates a big loophole in the pharmaceutical legal framework, which will inevitably lead to marketing of counterfeit medicines [(23)]. This practice also has forced and may force some local private manufacturers (the government encourages it heavily to grow) and importers out of the business by overwhelming Sudanese market with low price non-registered medicines of dubious quality [(30)].

In this context, it is worth asking what value-added the CMS contributes, as it is presently functioning. Some serious side effects of the CMS identified in this review, and experiences of other countries where state owned enterprises were privatized, will be used to support our argument in answering this central and serious question of policy. However, this is not to say that CMS has no future: there are substantial investment opportunities. Many can be turned around under new ownership and will succeed.

Privatization of CMS's ownership

The public sector medicine supply institutions have not succeeded (CMS is not exceptional) so far in organizing a reliable and regular essential medicine supply for the public health facilities [(39)]. One of the most criticisms of the public medicine supply system in Africa, in general, and in Sudan, in particular, is how badly they are internally managed. There are those who agree that a greater amount of real pharmaceutical resources could be made available to the public health care system and the access to essential medicines could be significantly increased, if managerial efficiency of the system improved [(40)]. Given the limitation of the public sector - due to constraints inherent in operating a government medicine supply organization even after autonomous experience - and the stabilized role of the private sector organizations, such as private pharmaceutical sector organizations (rapid increase in importing companies, manufacturers and pharmacies), one of the obvious solution of choice for the government pharmaceutical policy-makers would be to privatize the ownership of the CMS to the extent possible. By privatizing the ownership of the CMS, competition will take place (i.e. the CMS will lose its current monopoly in distributing medicines to public health facilities) leading to decrease in medicine prices. Therefore, the privatization is the most important strategy to reduce medicine prices and to ensure safety, efficiency and availability of quality medicines and medical supplies. It also will lead to an improvement in overall economy by offering equal opportunity to different pharmaceutical companies, especially the local manufacturers.

Aim and objectives

Overall goal of the privatization of CMS ownership is to improve access to essential medicines and other medical supplies in order to improve health status of the population, particularly in far states, for instance, western and southern states.

More specifically, the establishment of alternative ownership for CMS by selling the majority of the shares to the private sector will achieve the following objectives:

- High access to essential medicines of good quality and affordable prices to the states' population and governments;

- Efficiency and effectiveness in drug distribution system and to avoid the serious pitfalls and incidences that reported during the last ten years in CMS;
- Equity by reaching all remote areas currently deprived from formal medicine distribution channels;
- Improvement of the quality and quantity of delivery of medicines to the public health facilities.

Why changing the ownership will improve the CMS performance?

The privatization of public enterprises forms part of the government strategy of strengthening the role of the private sector in development to achieve the vision of the 25-year strategy in which the private sector will be the engine for economic growth [41]. Despite the lack of a direct causal link in neoclassical theory between private ownership and efficiency, there exists nonetheless a plausible argument that associates private ownership with increased productivity and efficiency [9]. According to the authors the reasons include: under private ownership, there would be less political interference in the decision making of the firm; managers and other employees in private firms would receive higher salaries, more clearly linked to productivity and profitability norms; privatization would impose on firms the discipline of commercial financial markets; and privatization would replace supervision by disinterested government bureaucrats by that of self-interested shareholders. There are many arguments in favor of privatization of public organizations. For instance, Nellis and Kikeri [9] argued that to effect needed financial and efficiency improvements, the ownership of public enterprises should be privatized. The authors added that a common problem with public owned organizations in developing countries is that the yield of many of their investment is low in comparison to expectations or in comparison to the private sector. Advocates of this method [42-46], generally, claim that privatization has the following advantages.

i. The privatization is efficient and effective, because it fosters and initiates competition. The competition among firms drives the cost down. Empirical studies clearly prove that the cost of the services provided by government is much higher than when the services are provided by private contractors. For example, CMS's declared mark-up on cost (35%) amounted to 2.3 times the private mark-up (15%). In addition, private sector pays taxes (CMS is exempted), customs and other government fees. The recent study conducted by GDOP reveals that, in practice, the CMS mark-up was 248% [31];
ii. The privatization also provides better management than the public management. Because decision making under privatization is directly related to the costs and benefits. In other words, the privatization fosters good management because the cost of the service is usually obscured;
iii. The privatization would help to limit the size of government at least in terms of the number of employees. On the other hand, it is a fact that overstaffing is common in publicly owned enterprises;
iv. The privatization can help to reduce dependence on a government monopoly which causes inefficiencies and ineffectiveness in services;
v. Private sector is more flexible in terms of responding to the needs of citizens. Greater flexibility in the use of personnel and equipment would be achieved for short term projects, part-time work etc. Whereas bureaucratic formalities are said to be very common when the service is delivered by government. Less tolerance and

strict hierarchy in bureaucracy are the reasons of the inflexibility in publicly provided services.

vi. In Sudan, the private pharmaceutical sector is well developed. It also enjoys high political commitment, particularly after the adoption of free market policy in the early 1990s. The private pharmaceutical sector is now playing a very important role in the availability of essential medicines, where the public supply systems failed to make medicines regularly available in public health facilities, especially in far states. It will definitely help in a smooth conversion of the CMS to a private company.

vii. The welfare gains from the privatization can be greater than the net benefits from other reform [7], because the privatization may bring greater net benefits than improved operation under government ownership as was the case of the CMS. For instance, taxes and profit from the government shares could finance other health services.

With a change to private ownership, the new company is expected to:

- Increase geographical and economic access to essential medicines in all states (i.e. in both rural and urban areas) to reach at least 80% of the population (currently less than 50% of population who have access to essential medicines);
- The tax collection from the new business that becomes more efficient after privatization will increase. This tax revenue could be used to finance other health care activities.
- If the government reserves some shares (not more than 51%) in the new business, then its shares' profit could be used to finance free medicines project in hospitals outpatients' clinic and also other exempted medicines, for example, renal dialysis and hemophilic patients treatment.

Disadvantages of private companies

Set against these advantages, there are also some disadvantages that are expected to emerge from the privatization of CMS. Although data about the impact of privatization of public medical supplies are anecdotal, the increase in medicines prices is expected. Babar et al [17] found that the privatization of National General Medical Stores in Malaysia led to an increasing trend in prices when compared with pre-privatization price of medicines. This will not be the case in Sudan, because medicine prices are regulated by the government. Staff reductions, which commonly seen by purchasers of public enterprises as an important factor in cutting costs and boosting returns [9] are indeed a disadvantage. However, in Sudan funds have been set up to provide direct compensation for laid-off staff [9]. Babar et al [17] claim that the use of a public system of distribution reduces cost to economy, results in the availability of quality medicines, while decreasing the price of medicines. But, the evidence from Sudan [31,36] does not support this argument.

Strategies to make CMS privatization successful

Our proposal should not be taken as a guarantee that the privatization of the CMS will necessary lead to improvement in efficiency and access to essential medicines under any circumstances. The following are prerequisites and strategies to make the privatization of CMS successful:

i. Medicines price control: market competition is an effective driver for maintaining affordable prices of medicines. In Sudan, the medicine price control policy protects the public against escalating expenditure on medicines. According to the Pharmacy and Poisons Act 2001, the GDOP regulates price of new registered medicines and requires approval for price increases of already registered medicines. Application of medicine registration must contain medicine price. Thus, manufacturers,

wholesalers (importers) and retailers are not free to set their own medicine prices. Instead, the medicine prices are vigorously controlled by the FMOH. The FMOH fixes whole prices at 15% of medicine cost and retail prices are set at 20%. To keep medicine prices as low as possible, the FMOH continues its current role in regulating medicine price, but this time including medicines distributed by the new company (which is not the case in the current situation, i.e. the lack of such control on price of medicines distributed by the CMS). In addition, the market free competition will even result in further reduction in the prices.

ii. Rarely used medicines: these are life saving medicines of small market. To assure the regular availability of such medicines, the establishment act of the new company would hold it responsible for the availability of these medicines. Moreover, medicine companies that import medicines of low market value could be offered a number of incentives, such as exemption from tax, duties and other formal fees. The GDOP would list the rarely used, unprofitable medicines that deserve the incentives.

iii. Special government's share: The government may retain a special (or 'golden') share (i.e. 51%) to protect a newly privatized business from unwelcome take-over on national security grounds, or as temporary measure, to provide an opportunity for management to adjust to the private sector. The special share requires that certain provisions in the Act of the new company may not be changed without the specific consent of special share holder. The presence of a special share is useful tool but is not intended to be a government straitjacket on the management. The management and not the government are generally responsible for ensuring that the special share's provisions are observed. In order to develop a free market in shares, special shares should be, as far as possible, time limited. Since the purpose of privatization is to remove the government from ownership of the CMS, it may seem strange to talk about special shareholding. But in some cases, especially where there are major uncertainties about the probable market of the business, for example, United Kingdom and other governments have sold their ownership interest gradually in several times over a period of years [47].

iv. Resistance of CMS's employees: It is not surprising that, this reform will be confronted by some obstacles and resistance from CMS member of staff. To avoid such resistance, consensus should be built by negotiation with relevant ministries, public and private sectors, Sudan's labor trade union, especially the CMS branch, and interest groups so that all 'buy into' the process and negotiate the goals. In addition, various benefits could be offered to overcome the resistance of CMS's staff. Incentives include compensation to employees by the new company, who might otherwise be able to disrupt the privatization through strike and demonstration, and the use of media. Dissemination of information about the current situation and expected outcomes with more focus on the fact that nobody can claim that the social objectives fulfilled by CMS could be lost by its privatization because for patients the CMS was privatized in the early1990s after adoption of user fee policy. In this regard, the political commitment is essential and can also withstand the opposition to the privatization from CMS's employees and others.

v. Strong Management Board: The Management Board will need to ensure the new company

fulfils its statutory duties, by closely monitoring the progress made by the company and to demonstrate the good health of the company in the general auditor annual finance check. More specifically, the Management Board exercises the following roles:

1. Sets and maintains the new company's norms and values;
2. Ensures the company obligation to patients and other stakeholders are understood and met;
3. Ensures the necessary financial, human and other resources are in place in order to fulfill the aims, meet the objectives and review management performance;
4. Sets high level strategic directions of the company to fill the gap in access to essential medicines;
5. Determines whether the company can precisely achieve its objectives based on frequent assessments. This could be done by establishment of systems that enable the Management Board to follow and facilitate the achievement of the company objectives;
6. Understands what information it needs to assure that the objectives are being met and the constraints are managed;
7. Develops the company's organizational structure and regularly review its fitness for purpose and exercise accountability.

The role of FMOH

Private enterprise functions most efficiently if market forces are allowed to operate independently and completely unfettered. Nonetheless, some FMOH involvement is necessary to ensure the availability of and proper use of good quality and affordable pharmaceuticals. So FMOH will continue its current responsibility for licensing, inspecting and regulating the distribution system without any discrimination between different organizations including the new established business; registration of medicines; quality control of medicines and maintenance of quality throughout the system; facilitating the development of and adherence to the national medicine list in the public health facilities; encourage purchasing of registered medicines from the least cost reliable sources; and enforcement of price control system. FMOH could also be involved in informing private distributors and the public about the appropriate use of medicines.

At the public health facilities, however, freedom-of-choice arguments that would justify a laissez-fair approach to private sector importing do not apply; there is the overriding merit-good aspects of medicines need, the related requisites of availability, cost-efficiency, and quality control. Some pharmaceuticals are more cost-effective than others; therefore the enforcement of a government-mandated essential medicine list lowers the real resource cost of a given quantity of pharmaceuticals necessary for alleviation of common diseases. Standard treatment guidelines alleviate unsuitable medicating practices, particularly over-medication, and reduce costs to consumers.

Conclusion

The privatization of the ownership of CMS is recommended taking into consideration the lessons learned from privatization of other public companies in Sudan. By resurrecting competition, which could be achieved mainly through the privatization of CMS ownership, many of the mentioned pitfalls can be avoided. The paramount objectives are to improve the access of the people to essential medicines across different states; to stop unlawful practice of the distribution of non-registered medicines to the private pharmacies and to finance other primary health care services including free medicines project at hospital emergency departments. The new business should

be responsible (of course without any kind of monopoly) for medicine supply and distribution to the public health facilities on competition basis. The initial capital of the medicine stocks for the different health facilities should be given by this new business by signing a clear agreement with interested states' ministries of health.

We conclude that the case for CMS reform is even stronger today than it was in the early 1990s when the reforms were started. Although there are many highly able and committed individuals throughout the public sector, in the absence of the single-minded pursuit of commercial success (which is also in the long-term interest of employment growth and the public at large) narrower concerns have prevailed, of a kind that are seen in public enterprises everywhere. Managements and Boards are less able and less willing to impose accountability for results on themselves and their employees; stock-out of life saving items is common; and sanctions for non-performance are often absent altogether. To overcome all these common symptoms of all public owned enterprise, and to achieve the strategic objectives of FMOH by increasing the access of population to the essential medicines, the privatization of CMS's ownership is the best solution of choice. This proposal offers an opportunity to build on the success of the CMS and best overcomes the shortcomings emerged during the past decade. The proposed new organization would be the company of choice for all pharmacies in both public and private sectors throughout the country. We are convinced that a private organization with a clear vision, purpose and efficient Management Board is best able to fill the gap in access to essential medicines and to respond to changing health care environment.

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