Investment Climate and Business Environment Research Fund

The Potentialities of the Private Health Sector and its Role in Health Services Provision in the Sudan

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Abstract

The study focuses mainly on reassessing the potentialities of the private health sector and its role in the health services provision in the Sudan, more specifically the study tries to evaluate the importance of private hospitals in delivering health services, and limitations on publicly provided services, to see also to what extent the technical quality of services provided by the private hospitals, to identify the constraints and difficulties facing private hospitals services.

The study adopted the descriptive and the analytical approaches. Both quantitative and qualitative data were used. In addition to the reviewed literature and the statistical records of the Ministry of Health were used to collect the needed secondary data. The primary data were collected using sets of needed questionnaires and interviews. The questionnaire has been conducted with patients in some private hospitals in Khartoum state. While key informants, doctors and medical staff in some private hospitals in Khartoum state were interviewed.

The main findings revealed that private health care provision is growing in Sudan, and private hospitals play a significant role in providing health services ,The concentration of private hospitals are not balanced. The major strength of private hospitals is: provision of quality services with reliable support staff, comfortable environment for the patients with a good management. The major constraints facing private hospitals are: absence of direct support by the government to this type of investment, weaken regulatory role by MOH, and heavy taxes and fees imposed by the government.

The study recommended that: The government should assist private hospitals services to increase their provision of services, and this can be through: Provide some incentives in investment acts to support private hospitals, reducing taxes and fees imposed, offering easy procedures relating to imports of health requirements and machines and some necessary drugs. Also the study recommends that widening access to private hospitals facilities by ensuring non-exploitive prices.

Key Words: Health. Private Health. Provision of Health Services.

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Acronyms

AIDS	**:**	Acquired Immune Deficiency Syndrome.
FMOH	**:**	Federal Ministry of Health.
GDP	**:**	Gross Domestic Product.
GNP	**:**	Gross National Product.
HDI	**:**	Human Development Index.
IMF	**:**	International Monetary Fund.
IMR	**:**	Infant Mortality Rate.
LDCs	**:**	Less Developed Countries.
Ls	**:**	Sudanese Pound.
MOH	**:**	Ministry of Health.
PCGDP	**:**	Per Capita Gross Domestic Product.
PCHE	**:**	Per-Capita Health Expenditure.
PHC	**:**	Primary Health Care.
PSP	**:**	Private Sector Provider.
SAPs	**:**	Structural Adjustment Programs.
SMOH	**:**	State Ministries of Health
SNCS	**:**	Sudan National Comprehensive Strategy.
SSA	**:**	Sub Saharan Africa.
TB	**:**	Tuberculosis.
U5MR	**:**	Under Five Mortality Rate.
UN	**:**	United Nations.
UNDP	**:**	United Nations Development Program
UNICEF	**:**	United Nations International Children Emergency Fund.
USAID	**:**	United State Aid.
WB	**:**	World Bank.
WFP	**:**	World Food Program.
WHO	**:**	World Health Organization.

1. Introduction

1.1 Background

Health care policy in most developing countries has emphasized the development of government owned health services, largely financed by government revenues. But most public health services in developing countries are severely under–resourced which resulted in many problems and limitations in the provision of health services. Over most of the period since the Second World War, attention has focused on how to plan, develop and improve yields of the public investments in the health sector. However, the efforts towards that seemed far from adequate. Due to this situation within the public sector, the private health sector appeared to offer promise means of improving or avoiding the limitations of the public sector in delivering the needed health services.

In Sudan, spending on health has been significantly reduced since 1992 after the implementation of liberalization policies which reflect some features of Structural Adjustment Programs (SAPs). Health Care Facilities have been relatively affected by this situation such as insufficient resources allocated to health sector, unequal distribution of the health facilities and the deterioration of the work environment.

However as a result of these changes private provision of health services started to increase in its numbers.

1.2 Statement of the Problem

The importance of private sector in achieving health sector objectives within developing countries is debatable; some studies indicate that private provider's play a significant role in health care delivery , even to the poor (Gwatkin & others 200). In many countries private providers are more commonly consulted for different types of illness than public providers are. Families spend relatively large amounts of money for curative services in the private sector, even when there is cheaper public sector, alternatively available. Other studies highlighted how increased private sector or commercial presence in the health sector threatens people right to health.

More private sector involvement risks exacerbating existing problems of equity, equality and capacity in public health systems. According to Babiker (1996), the private sector in the

Sudan started to be much more involved in services especially in the face of deteriorating public services.

So there is an urgent need to study the private the private health services in the Sudan and their role in health services provision.

1.3 Objectives of the Study

The overall objective of this study is to focus mainly on reassessing the potentialities of the private health sector and its role in the health services provision in the Sudan. But the private health sector in the Sudan is complex and made up of adverse mix of providers ranging from traditional to modern practitioners. The paucity of information and limitation of time and budget caused me to restrict the analysis to the private hospitals only as an example reflecting the situation of the private health services in the Sudan. So in more details the objectives of the study can be stated as follows:

- To evaluate the importance of private hospitals in delivering health services, and limitations on publicly provided services.
- To show to what extent poor families often use private hospitals services.
- To explain what factors induce people to use private hospitals?
- To evaluate the quality of services provided by the private hospitals
- To identify the constraints and difficulties that face private hospitals services.

1.4 Methodology of the Study

1.4.1 Research Setting

The study will be conducted in Khartoum State, where most of private health services are concentrated; therefore the results obtained are assumed to have important implication for the whole country.

1.4.2 Data sources and types

Both primary and secondary data will be used in the study. Secondary data can be obtained from literature, reports and statistics of Ministry of Health (MOH). Primary data will be collected through a set of questionnaire and interviews. The questionnaire will be conducted

with patients in some private hospitals in Khartoum State. Interviews will be conducted with some key informants, doctors and medical staff in some private hospitals in Khartoum State.

1.4.3 Sampling Procedure

The sample strategy will be used in this study is two- stages cluster random sampling.

Stage 1: Khartoum State was randomly selected from the 26 total states in Sudan. Khartoum state was selected because most of private health services are concentrated, to compare Khartoum State with other States, see table (8), P 18.

Stage 2: As Khartoum State is divided into three provinces: Khartoum, Khartoum North, and Omdurman). Khartoum province (Greater Khartoum) was randomly selected from the 3-provinces in Khartoum State. The number of private hospitals and the variation of health facilities provided was concentrated more in Khartoum province. (Annual Health Statistics Report 2007).

According to the State Ministry of Health Statistics, the total number of private hospitals in Greater Khartoum is 98 hospitals in 2009. From this study population, 15 percent of hospitals will be selected randomly (for the limitation of time and the budget available), so total number of private hospitals will selected randomly is 15.
In determining the size of the sample, and on the advice of some statisticians, regarding the characteristics of the population and the scarce previous studies, the following formula is suggested:

At 95% level of confidence, $\alpha = 0.05$ (very common choice), the critical value Z=1.95,

P=0.5, Q=0.5, E= 0.5(using less margin of errors):

$$N \text{ (sample size)} = \frac{1.95 \times 0.5 \times 0.5}{0.05} = 384$$

So the sample will be selected is 384 patients. However, the actual sample size will be taken was 384 patients. Accordingly 26 patients will be selected randomly from each hospital.
According to the advice of some statisticians considering the homogeneity of the population and the cost factor, interviews will be conducted with 20 key informants in private hospitals.

1.4.4 Data Analysis

Both qualitative and quantitative analyses will be adopted in the study. Descriptive analysis tools, such as frequencies will be use. While qualitative analysis will be use to supplement the descriptive part of the analysis.

The primary data collected through questionnaire will provide the following:

1- Socio- economic characteristics of the patients
2- Health seeking behavior of patients in private hospitals.
3- Patients perception to private hospitals services.
4- Patients perception to public hospitals.
5- Difficulties facing patients when they access to private hospitals.
6- Characteristics of health care provided in private hospitals.

1.5 Organization of the Study

Section one gives the general framework of the study. Section two reviewed some literature regarding the private health services. The third section is devoted to explain health services in the Sudan. Section four introduces the private health services in the Sudan. Section five constitutes the result of the survey. The last section is directed to concluding remarks and recommendation.

2. Literature Reviews

2.1 Introduction

This section provides a critical review of the literature related to health generally and private health services specifically. It begins by explaining the value of health, health in developing countries and least developed countries and health financing in developing countries. Then it discusses the impact of adjustment policies on health, and public expenditures and health. The main elements of private health services are also discussed.

2.2 The Value of Health

In a simple and important sense, health is wealth, if one measures welfare more broadly than income or consumption; poor health is itself a deprivation that is part of poverty. Amartya Sen (1999) has characterized poverty as “capability deprivation”, where a person lacks the “substantive freedoms”’ he or she needs to lead “the kind of life he or she has reason to value”. The Human Development Index (HDI) introduced in 1990 by Mahbub Ul-Hag and colleagues,

reflects achievements in “ the most basic human capabilities – leading along life, being knowledgeable, and enjoying a decent standard of living” (UNDP 1990), that can be represented as health, education, and income, which are indeed the three pillars of human development.

Increasingly, research is now showing that a healthy population is an engine for economic growth. The most impressive account of these trends comes from the work of Fogel, whose seminal studies have explained the relationship between body size and food supply, and have shown the latter to be critical for long-term labor productivity. (Fogel 1991, 1997, quoted in the report of working group1 of the commission on macroeconomics and health, WHO, 2002).

Robert Barro (1997), among others, has shown that life expectancy is significantly correlated to subsequent economic growth. Studies on a more modest scale have followed groups of children who can be separated according to the calorie intakes during their first 3-years of life, and it is clear that those with higher calories intakes had higher incomes and therefore were presumably more economically productive approximately 30-years later (The report of working group1 of the commission on macroeconomics and health, WHO, 2002).

People with higher incomes have a greater command over the good and services that promote health, such as better nutrition, access to safe water, sanitation, and good quality health services. Wealth undoubtedly leads to health but health should also be seen as a form of human capital and therefore an input into the growth process, as well as an output: countries with educated, healthy populations are in a better position to prosper, especially in a favorable policy environment.

2.3 Health Status in Developing & Least Developed Countries

Over the past forty years, developing countries facing enormous health problems such as absolute levels of mortality in developing countries remain unacceptably high: child mortality rates are about ten times higher than those in the established market economies. 11 million children die each year; almost half of these deaths are a result of diarrhea & respiratory illness, exacerbated by mal-nutrition. In addition, every year 7 million adult die of conditions that could be inexpensively prevented or cured, tuberculosis alone causes 2 million of these deaths. About 400,000 women die from the direct complications of pregnancy and child birth. Maternal mortality ratios are on average, thirty times as high in developing countries as in high income countries (World Development Report 1993, P1).

Based on statistics from Human Development Report 2001, life expectancy & mortality rates in least developed countries compared to developed countries as follow:

Table 1: Life Expectancy and Mortality Rates, by Country Development Category (1995-2000).

Development category	Population (1999- Millions)	Annual Income US. Dollars	Life expectancy at birth (years)	Infant mortality per, 1000 live birth	Under 5-mortality rate per 1000 live birth
Least-Developed Countries	643	292	51	100	159
Other low-income Countries	1,777	538	59	80	120
Lower middle income countries	2094	1200	70	35	39
Upper middle income countries	573	4900	71	26	35
High income countries	891	25730	78	6	6
Sub- Saharan Africa	642	500	51	92	151

Source: Human Development Report 2001.

The low income countries, with 2.5 billion people- and specially the countries in Sub-Saharan Africa, with 650 million people-have far lower life expectancies and far higher age-adjusted mortality rates than the rest of the world as shown in table (2.1), to reduce these staggeringly high mortality rates, the control of communicable diseases and improved maternal and child health remain the highest public health priorities. (Report of the commission on macroeconomics and health, 2001. P2).

Dunlop D and Martins, assumed that, the most urgent problem for developing countries is that their governments lack the funds needed to finance health services expected by their citizens. Hospitals and health stations needed to be built, qualified health personnel needed to be brained, and imported equipment, drugs and supplies need to be paid for with foreign exchange. (Dunlop D. and Martins J.,1995, P28).

2.4 Impact of Adjustment Polices on Health Status

Several observers have stressed that recent economic recessions and associated adjustment programs in developing countries are having a markedly deleterious effect on health and nutrition

among the poor of those countries (Jolly, 1988; Jolly 1984; UNICEF, 1984; Inter-American Development Bank).

For example, in an analysis of the effects of economics adjustment programs during the period 1982-84 in several Latin American countries, the inter- American Development Bank (1985) concluded that " the social cost in terms of reducing living standards, high inflation, and unemployment has been tremendous, and unequally distributed" . In another study Jolly (1988) cited some evidence of rising malnutrition in African countries during the economic decline of early 1980s. He reported that the proportion of children moderately or severely malnourished almost doubled between 1980 and 1983 in such countries as Botswana, Burundi, and Ghana. Smaller increases were recorded for other countries, but base levels were high, e.g. 20% in Lesotho, 30% in Rwanda, and 45% in Madagascar.

On the basis of foregoing observations, UNICEF (1984), Jolly & Cornia (1984), and Jolly (1988) called for special measures to mitigate the impact of adjustment programs on the poor. Referred to the "adjustment with a human face", these measures are intended primarily to raise the consumption levels of the poor to the basic – needs minimum during the adjustment periods when restraints on consumption levels in general are greatest. Jolly identified three types of policy action for improving the welfare of the poor in this context: first, the goals of the adjustment policy should clearly acknowledge a concern for basic human welfare and be committed to protecting the minimum nutritional levels of the most vulnerable segments of the population. Secondly, the implementation of the adjustment program should include measures to maintain a minimum floor for nutrition and other basic human needs, depending on what the country can sustain in the long run, measures to restructure the productive sectors in/order to enhance the productivity of small producers via (easier access 10 credit, internal markets etc.) and promote labor–intensive investment; and measures to solicit international support for these aspects of adjustment; particularly in the form of long –term finance. And, thirdly, a system should be developed for monitoring nutrition levels and the human situation during the adjustment period. Thus adjustment policies should not be concerned only with inflation, balance – of payments problems, and the growth of GNP – but also with nutrition and health conditions, food balances, and the development of human resources.

2.5 Public Expenditure and Health Status

The restructuring of public expenditure as part of economics adjustment programs may affect health and nutrition, primarily because of the vulnerability of the social sectors to cuts in government spending. In this part we will examine the empirical evidence on this subject, and will present findings from case-studies in different countries.

The conventional wisdom is that, with increasing budgetary restraints and accompanying shifts in priorities, the social become vulnerable to budgetary cutbacks; from a joint World Health Organization / World Food Program Study (1988) on the health impacts of adjustment programs in the African region, it appears that, in more than half the cases studies, the health sector has been the first to suffer a cutback when there were budgetary constraints. Reduced health expenditure results in a severe decline in the quality of the health infrastructure, besides limiting supplies of pharmaceuticals. (Cooper Weil et al.,1990, P13). Cornia et al. (1988) compiled evidence from case studies showing a direct association between cuts in government expenditure on health and other social services and deterioration in health status. Case studies were presented from ten countries: Botswana, Brazil, Chile, Ghana, Jamaica, Peru, Philippines, and the Republic of Korea, Sri-lanka, and Zimbabwe. They showed that the nutritional status of children had deteriorated in all of them, except the Republic of Korea and Zimbabwe. Some of the findings are reviewed below:

In the Philippines, per capita GNP fell about 3% annually over the period 1979-84. As a result of worsening economic conditions, real per capitals public expenditure on health, housing, and other basic social services in 1984 came to only about one- third of the 1979 level (UNICEF, 1988, P 196-200).

A general deterioration in health status was observed, as manifested by higher morbidly, especially from such diseases as diarrhea, pneumonia, and tuberculosis.

In Ghana, budgetary restraints coupled with accelerating inflation, made it very different to allocate adequate resources to the social sectors, expenditure on which fell from 18% of the GNP in 1972 to 10% in 1982 (UNICEF, 1988, P10). Since per capita GNP declined by nearly one-third over this period, expenditure on social sectors had actually fallen sharply in real terms. This resulted in acute shortage of drugs and equipment in the health sector. The decline in health

service provision coincided with, and probably contributed to, an increased incidence of such diseases as yaws.

Similarly, in Jamaica, economic stagnation and rapid inflation resulted in sharp declines in public expenditure during the first half of the 1980s. Social expenditure fell by 44% in real terms over the period 1981 – 85 (Boyd, 1988 p 147).

In Peru, per capita GNP decline at a rate of about 2% annually over the period 1977-84.
Social services accounted for only 18% of total government spending for the period, as compared with 26% in 1968 – 76. (Figueroa, 1988, P 166).

In both countries, health conditions deteriorated in terms of reduced health capital stock (e.g. hospitals, clinics, and equipment) or increased incidence of communicable diseases. In Peru, it was estimated that, during the study period, about 44% of children under 6 years of age were malnourished.

2.6 Health Financing in Developing Countries

Changes in the way health care is financed can, however, have far-reaching consequences. By altering the structure of incentives, a change in the method of financing care or paying care providers may change the type and quality of relations among providers, and between providers and consumers. The financing method may affect the growth of health care costs, the location and type of services produced, and the number and type of staff employed (Report of a WHO Study Group, 1993, P2).

2.6.1 Government Source of Finance

Government financing for health includes health expenditure at all levels of government, together with the expenditure of public corporation.
Government are normally involved in the financing of health services because private markets for health care are unable to satisfy, even minimally the social requirement of efficiency and equity.

Economists use the term "market failure" to describe this situation. So theories of market failure provide possible rationale for government interaction: to provide public goods, and internalize externalities; to overcome cream-skimming and other inefficiencies in the market for private

services; to address information problems and improve competition and contestability in providing markets; and to guarantee access to health care for groups who have inefficient resource (Caludia Scott, 2001 P25).

While theories of market failure in health care and health insurance have featured prominently in the health care literature, there is growing recognition that the mere existence of market failure does not provide both a necessary and sufficient condition for government to intervene. Policy-makers must justify interventions and ensure that benefits outweigh costs. While a society may suffer welfare losses arising from market failure, interventions by government impose cost, potentially resulting in government failure.(Ibid, P29).

2.6.2 Private Source of Finance

Private providers are defined as those which fall outside the direct control of government; private ownership generally includes both for-profit and non-profit providers. For example, private ownership would include health care facilities owned by individuals who seek to earn profits, clinics and hospitals owned by private employers, and those operated by religious missions and other non-governmental organizations. (Berman P and Hanson K 1993, P4).

United State Agency for International Development (USAID) assumed that private health sector in sub-Saharan Africa ranges from traditional healers, pharmacies, and shopkeepers selling heath care products, to nonprofit and for profit clinics and hospitals (www.usaid.gov).

2.6.3 The Importance of Private Health Sector

Private sector providers (PSPs) are important providers of heath care; in many developing countries when people seek treatment for illness they visit PSPs first. In many countries most treatment of malaria and STIs takes place outside the public sector, through visits to PSPs. (Smith E, Brugha R nd Zwi A, 2001, P 9). In India, an estimated 60-85% of TB cases seek treatment initially from PSPs (Uplekar et.al 1998, quoted in Smith and et.al, 2001, P9). USAID put many reasons why people use the private health sector such as convenience, perceived quality, confidentiality, or because nothing else is available. Private health care in Sub-Saharan Africa is not just for the rich. African's of all socioeconomic background turn to the private sector for their health needs (www.usaid.gov).

Also Aljunid and et.al study assumed a variety of reasons why people use the private health sector, such as: ease of geographic access, shorter waiting periods; greater availability of staff and drugs, new drugs development are widely found in private retail outlets long before reaching the public sector; greater confidentiality in dealing with diseases such as TB and STIs; perceptions that PSPs are more considerate, caring and sensitive to client concerns; perceptions that, in same setting, that private sector services are technically superior.(Aljunid, 1995; Swan & Zwi 1997; quoted in Smith E, Brugha R and Zwi A, 2001, P9).

The private sector is typically involved in every aspect of health services delivery in developing countries. Private practitioners are most prominent in delivery of primary and curative care, largely due to relatively low capital requirements, high demand, and patients' willingness and ability to pay (Hanson and Berman 1998 quoted in Harding.A, and Preker. S.A 2003, P11).

The evidence is growing that working with private providers is better than ignoring them, and that cooperation can be an effective strategy for pursuing some important sector goals. In many instances, however, private health care providers' presence and capacities will necessitate working with and through them to pursue desired objectives. (Harding.A, and Preker.S.A, 2003, P12).

Harding and Preker assumed that examination of the public-private interface in well-performing health systems reveals several mechanisms for interaction that appear necessary in order for private providers to play an effective role in a health system they assumed the following basic prerequisites for getting more from private health care providers: They include: knowledge (on the part of policymakers) about the private sector; ongoing dialogue between public and private stakeholders; and institutionalized policy instruments for interacting with the private sector (especially financing, regulation, and dissemination of information). Regardless of sector priorities or the modalities being considered for working with the private sector, all three factors are present in all the well-performing mixed delivery health systems.(ibid P13)

3. Health Sector and Private Health Services in the Sudan, Overview

3.1 Introduction

This section divided into two parts, firstly it examines the health sector in the Sudan, and then it explains private health services in the Sudan.

3.2 The Health Sector in the Sudan

This part introduces a general outlook to the health sector in the Sudan. Firstly, it explains some indicators of health sector in the Sudan, such as IMR and life expectancy, and then it discusses the main features of the health sector in Sudan with regards to services provision and government expenditure on health.

3.2.1 Some Health Indicators in Sudan

Health services are provided by public and private sectors, the main provider, director and the agency responsible for health services is the Federal Ministry of Health, besides the Army Medical Services and Police Medical Services.

The Federal policy, which was adopted, necessitated new structure and organization of the health sector. Accordingly, there is a Federal Ministry of Health (FMOH) and 26 State Ministries of Health (SMOH). The Federal Constitutional decrees have supported and shifted almost compete execution and implementation of promotion, preventatives, and curative activities to the State authorities. The environmental health services become the direct responsibility of the municipalities. (El Sayed.1997, P8).

Infant Mortality Rate IMR:

IMR is the number of infants who die before their first birthday for every 1000 live births. Health Scientists argued that child mortality is a sensitive measure of health status. It is considered as a good indicator for the evaluation of the performance of the health service program. Table (3.1) indicates the situation of IMR in Sudan in some selected years.

Table 2: Infant Mortality Rate (IMR) in the Sudan in Selected Years

Source		IMR Value
Census	1955/ 56	135
Census	1973	110 – 120
Census	1983	108
UN estimates	1980 – 85	116
UN estimates	1985 – 90	106
UN estimates	1990	104
Census	1993	110

Source: Government of Sudan & UNICEF .1996

According to the table (2), there is improvement in the general situation as IMR declined from 135 / 1000 in 1955/65 to 108/1000 in 1983. Then it went up to 116/1000 during 1980 – 85.Estimates for the period 1985–90 shows a decline to 104 / 1000. But it rose again to 110/1000 in 1993.

Life Expectancy:

Table 3: Life expectancy at Birth for Sudan and African Countries (selected years)

Years	Life Expectancy			
	Sudan		Africa	
	Male	Female	Male	Female
1970	41	43	44	46
1975	43	45	46	48
1980	45	48	48	50
1985	47	50	50	53
1989	49	51	52	55
1990	51	56	52	55
1991	51	51	52	55
1992	51	53	52	55
1993	52	53	52	56
1995	53	55	52	55

Source: Babiker, 2000, P 173.

Available data shows that for the last decades Sudan had been unable to achieve an increase in life expectancy at birth more than 12 years. Life expectancy at birth was estimated to be approximately 41 years at the time of independence (1956). It then increased to 53.9 in 1993. Malaria and endemic diseases are considered the main causes of morbidity and mortality in the country. Moreover,

difficulties to control the long boarders render the country prone to AIDS pandemic. (Sudan Program of Action for Development (2001- 2010), 2001, P 22)

Babiker (2000) made a comparison between life expectancy at birth in Sudan and African countries. He showed that life expectancy at birth for the Sudan is one of the shortest in Africa as is seen from the gap between the Sudan and the African average for the selected years for both sexes.

Number of Hospitals and Hospital beds:

Information illustrated in table (4), clearly reflect that, the number of hospital per 100,000 of population remained at the virtually constant level of 0.9 during the period 1993 – 98.

Hospital beds per 100,000 reflect a declining trend since 1993. Still the figures are low when compared to the Sudan National Comprehensive Strategy (SNCS) 1992 – 2002 target of 40,000 people with one hospital.

Table 4: The Number of Hospitals & Hospital beds per (100,000) of Population

Year	Rate of Hospital per 100,000 of pop	No. of beds per 100,000
1990	0.8	72.0
1991	0.8	75.8
1992	0.8	74.7
1993	0.9	84.2
1994	0.9	85.5
1995	0.9	85.5
1996	0.9	81.0
1997	0.9	79.0
1998	0.9	77.0
1999	1.0	62.2
2000	1.0	74.2
2001	1.0	73.0
2002	1.0	72.6
2003	1.0	71.3
2004	1.0	72.0
2005	1.0	73.7
2006	1.0	73.2

Source: Sudan in Figures, Central Bureau of Statistics (1988 – 2000) (2002 – 2006)

Also geographical distribution of health facilities between States in Sudan is not fair, all statistics (e.g.: Annual Statistics, FMOH) revealed that, the concentration of health facilities are basically in Khartoum, Gazira and River Nile States.

Health Manpower:

In dealing with health manpower, table (5) shows the health human resources per 100,000 of population during 2000 – 2006.

Table 5: Health Human Resources per 100,000 of population

Years	**2002**	**2003**	**2004**	**2005**	**2006**
Doctors	17.6	18.4	20	22.6	28.6
Specialist	3.0	3.1	3.3	3.6	4.5
Dentist	0.6	0.7	0.8	1.0	1.1
Pharmacist	2.0	2.0	2.0	2.5	3.2
Technician	9.4	9.5	11.3	13.3	14.7
Medical Assistant	21	20	20	19.5	19.7
Nurse	50.4	51.0	49	50.6	50.8
Public health officer	1.1	1.1	1.3	1.6	1.9

Source: Annual Statistics, FMOH, (2002 – 2007).

Most of the health manpower indicators showed slight improvement during the period 2000 -2007 due to the expansion in higher education. Every year about 300 graduates physicians are supposed to join the services from national universities, in addition to about 50 – 100 coming from abroad after qualification. (UN, Final Report, 1998; P25). Despite this fact the increase in the total number of medical practitioners is low. This is attributed to the services low reward within Sudan and consequent migration of physicians to Oil Reach Countries and Europe. Added to this the bulk of the health manpower is concentrated in the urban areas particularly in the capital city and other cities to the neglect of the rural areas.

3.2.2 Government Expenditures on Health

Sudan government budgetary allocations and expenditures are difficult to assess, only a limited proportion of the approved budget is actually disbursed. Also as a result of implementation of the Federal System, responsibility for financing health services is becoming decentralized. There is a transformation of financial and executive authorities to the States, and health facilities at the district and periphery levels are expected to finance themselves (Abbas, 2004, P120). Many observers attributed the significant reduction in government spending to the adoption of the IMF/WB structural economic reforms in 1992. The health sector represents the main economic sector that is being negatively affected. (See Babiker 1996, 2000; and Elias 1998).

Table 6 shows actual per capita health expenditure, and per capita GDP

Year	GDP at constant price in Ls million	Per capita GDP	% change	Actual Health Exp in Ls million	Per capita Health Expenditures	% change
1980/81	5990	335	-	8.4	0.47	-
1981/82	6513	356	6.3	14.9	0.81	72.3
1982/83	6612	352	-1.12	29.6	1.58	95.1
1983/84	6416	311	-11.6	36.0	1.74	10.12
1984/85	6041	285	-8.36	10.8	0.51	-70.7
1985/86	5976	272	-3.5	12.3	0.56	9.8
1986/87	6369	279	1.45	32.88	1.4	156
1987/88	6275	267	-4.3	19.93	0.8	-42.9
1988/89	6629	273	2.24	21.57	0.9	12.5
1989/90	6665	267	-2.2	17.93	0.7	-22.2
1990/91	6686	259	-3	12.26	0.5	-28.7
1991/92	7447	280	8.1	11.73	0.4	-25
1992/93	8364	335	20	4.457	0.17	-57.5
1993/94	8891	356	6.3	6.78	0.24	42.2

Sources: Data 1980/81 – 1985/86 based on economic survey (1980 – 88).
Data 1986/87 – 1993/94 based on Babiker 2000, p 93, table 5.2.1
Note: constant prices is 1981/82.

Table (6), shows that actual health expenditures decreased from Ls 8.4 millions in 1980/81 to Ls 6.78 millions in 1993/94. The period witnessed expenditure fluctuations. Health expenditures per capita declined from 0.47 in 1980/81 to 0.24 in 1993/94, about 48.9% drops, compared to 82.9% drops during the period 1986/87 – 1993/94.

The negative growth rates for these indicators increased in the last years especially 1987/88 – 1992/93. This indicates that health spending suffered gradually from expenditures cuts. These cuts in expenditures are not in line with per capita GDP growth pattern. It is clear that the declining share of government expenditures directed to health is translated into real declines in public resources for health, and even larger declines in per capita spending because of the rapid growth of population.

The resources availability as measured by PCGDP has not been the major factor that controls government health spending. (Babiker, 2000, P94).

Also Elias argued that, the declared objectives of curtailment of government spending on health, so as to reduce the budgetary deficit through removal of subsidies, has not been realized. He maintained that, the political priorities and considerations have played an important role in squeezing health services allocations in the public budget. The war in southern Sudan, militarization of the society, expansion in higher education institutions and decline of foreign aid, are some of the main factors that widened the budgetary deficit, not the public expenditures on the health sector. Elias assumed that these factors deprived the health sector from its deserved resources and caused the decline in its quality standards and increased its costs (Elias 1998. p 40).

3.3 Private health services in the Sudan

3.3.1 Introduction

This part introduces general information about private health services in the Sudan. Firstly, it started with the rise of the private health services, administration and typology of private health services, and affordability of private health services. Then it examines the private hospitals services in Khartoum State as an example of private health services in Sudan.

3.3.2 Rise of the private health services:

The historical background of private health services in Sudan showed that, expatriate physicians were not allowed to private practices, until the lat 1940 the Sudanese physicians were allowed to have their own practice in their private clinics after official hours .Gradually some Sudanese doctors left the health services for one reason or the other, they were licensed to open full-time private clinics , The first venture of establishing a private hospital in Sudan in the late 1950s, when Dr Abdulhamid Salih established Dar Ashifa Private Hospital. Real private sector ventures into health care delivery have started recently in the 1990s with the advent of privatization of the economy and the government abolition of free heath care (Bayomi 2006, p12).

3.3.3 Administration and typology of private health services

The Ministry of Health in Khartoum State and other states in Sudan delivers health services through a network of private and public owned health facilities such as hospital, health centers, and clinics. The delivery of health services is coordinated by the General Administration of Curative Care, Private Health Services Administration which on behalf of the MOH pursues polices. Relating to the provision of private health care services, including the supervision and regulation of the private health

services. Private sector providers in Sudan are a mix of the formal, such as doctors, pharmacists, and non-governmental organizations (NGOs), and the informal such as herbalists and spiritualists.

In dealing with the typology of private health services according to the Annual Health Statistical Report in 2007, we have the following kinds:

1. Private Hospital and Health Centers
2. Specialist Clinics.
3. General Practitioners Clinics.
4. Dental Clinics.
5. X-Ray Units.
6. Physiot Pharmacy
7. Public Pharmacy.
8. Private Pharmacy.
9. Veterinary Drug Store.
10. Veterinary Clinics. (FMOH National, Health information Center 2007)

In addition to this modern/formal services we have traditional health services such as herbalists, faith healers and spiritualists. It is not included in the FMOH Report because there is no enough information and statistics.

3.3.4 Affordability of private Health Services

Data for private health services is not sufficiently available. The Annual Health Statistical Reports provide recently the numbers and types of private health services in the Sudan in 2000 & 2007

Table 7: Private Sector Health Services in Different States 2000

State	Hospit h.cent	Beds	Specia clinics	Gener Clinic	Dental Clinic	Private Lab	X-Ray Units	Physio therap	Public Pharm	Private Pharm	.Drug Store	Vetrin. Clinic
Khartoum	50	796	200	250	136	682	50	15	102	422	29	15
Gazera	12	0	72	0	13	139	3	4	21	168	91	45
W.Nile	3	0	27	19	6	56	1	1	13	34	6	14
B.Nile	1	6	3	5	2	10	0	0	1	9	34	1
Sinnar	5	70	22	20	2	18	2	0	4	14	21	7
R.Nile	12	0	19	12	6	19	1	0	17	27	15	7
Northern	3	40	11	0	3	0	9	0	5	19	0	0
Kassala	9	62	6	23	3	25	4	1	13	70	34	9
Gadaref	1	20	18	17	4	10	3	3	6	32	18	7
Red Sea	2	99	30	18	5	28	2	1	22	31	10	2
N.Kordofan	0	0	28	15	5	3	2	2	10	27	83	9
S.Kordofan	0	0	2	10	0	0	0	0	3	7	86	1
N.Darfor	0	0	7	14	1	1	1	1	15	12	151	2
S.Darfor	2	20	13	9	4	22	2	0	15	40	180	4
W.Darfor	1	8	2	1	0	3	0	0	3	12	13	8
Total	101	1121	460	413	190	1016	30	28	250	929	776	136

Source: Annual Health Statistical Report 2000

From the tables (7) and (8) the number of private health facilities appears to be increased during the period 2000 -2007. For example hospital & health centers increased from 101 hospitals in 2000 to 229 hospitals in 2007 with 128 percent of increase, and also increase in total numbers of beds. The numbers of specialists clinics increased continuously during the period till it reached 1013 clinics in 2007 compared to 460 clinics in 2000.

Table 8: Private Sector Health Services in Different States 2007

State	Hospi and h.	Beds	Spe. clinic	G.Pra Clinic	Dental Clinic	Private Lab	X-Ray Units	Phy. Pharm	Public Pharma	Private Pharma	Vetr.D Store	Vetr. Clinic
Khartoum	162	1487	684	392	173	447	33	7	25	824	45	0
Gazera	36	0	80	97	18	162	8	3	15	189	46	45
W.Nile	1	12	34	6	6	56	4	3	13	34	7	7
B.Nile	2	0	12	14	1	21	0	0	2	16	55	2
Sinnar	4	40	17	23	5	33	2	1	4	42	22	7
R.Nile	8	30	27	18	10	30	6	0	12	35	19	3
Northern	2	35	23	8	5	22	2	0	2	27	35	3
Kassala	3	30	10	43	4	27	2	2	7	61	77	1
Gadaref	2	28	24	27	6	16	2	3	6	40	59	22
Red Sea	2	103	41	20	7	55	3	1	26	54	30	2
N.Kordofan	1	20	43	63	7	54	4	3	8	87	222	9
S.Kordofan	0	0	6	11	0	28	1	0	5	18	156	4
N.Darfor	1	0	18	14	3	26	3	0	6	15	94	0
S.Darfor	3	30	20	0	2	30	3	1	4	38	104	0
W.Darfor	1	15	6	0	0	6	0	0	7	16	31	22
Upper Nile	1	12	0	13	0	13	0	0	1	15	61	0
Total	229	1842	1045	749	247	1026	73	24	143	1511	1063	127

Source: Annual Health Statistics Report 2007.

The majority of the different types of formal/ modern private health providers in the Sudan concentrated in the Khartoum state, over 70 percent of Sudanese private providers in 2007 are located in Khartoum state. While South Kordofan state witnessed no private hospital or health centers. Also about 65 percent of specialists clinics located in Khartoum state. So it is clear that, Sudan as in many least developed countries, the center effective demand in health is far greater than other states demand, which influences the distribution of facilities. This reality, which has resulted in the inequality in the distribution of facilities between Khartoum state and other states, poses a real challenge to policy makers.

3.3.5 Private Hospital services in Khartoum state

Table (9) presents the growth in the number of private hospitals in Khartoum state.

Table 9: Numbers of Private Hospitals in Khartoum State in Selected Years.

Year	Private hos	% change
1985	9	-
1986	10	11.1
1987	10	0.00
1988	12	20.0
1989	16	33.3
1990	16	0.00
1991	22	37.5
1992	27	22.7
1993	32	18.5
1994	40	25.0
1995	43	7.5
1996	63	46.5
2000	50	-21
2006	163	226
2007	162	-.06

Source: Data from 1985-1996 Babiker 1996.
Data 2000, 2006 & 2007 from annual health statistical report 2000,2006 & 2007

From table (9), the total numbers of private hospitals has increased successively during the period (1985-1996). From 9 hospitals in 1985 to 16 hospitals in 1990, increased by 77 percent, and from 16 hospitals in 1990 to 63 hospitals in 1996, increased by 293% and from 50 hospitals in 2000 to 162 hospitals in 2007, increased by 224 percent.

So it is clear that there is a great change in the numbers and magnitude of private medical services took place during the last decades. However, this expansion took place within the context of economic adjustment policies which aims at reducing government sector sizes through cutting public expenditures generally and public health expenditures specifically.

Babiker, (2000) argued that this expansion in private sector has been mostly in the curative and secondary and not the preventive and primary health care sectors as national policy demands. This pattern of change is incompatible with the efficiency and equity goals of national health policy. (Babiker, 2000, P 116). Again Bbiker, assumed that: the damage to the equity objective is better seen

if we read this expansion in the context of increasing poverty rates, the urban nature of the private expansion and the high rises in private fees. The latter were estimated to increase by 25700% and 1034% between 1985-90 and 1990-95 respectively. (ibid, P 116).

The distribution of private hospitals in Khartoum state explained that, most of private hospitals are concentrated in distinct area near public hospitals or in area with a wealthy population, with few expansions of some that is scattered in rural areas.

Shadad in 1998 using survey information has shown that, patients in the private hospitals were mainly officers, commercial workers and employers offering health cover for their staff. Also she pointed out that, the specialization of these hospitals seems to be similar, surgery and internal medicine represented the bulk of health care provided. The kind of surgery performed is mostly for non-complicated and common conditions. (Shadad, 1998, P99). Elias assumed many factors responsible for the expansion in the private hospitals, such as: deterioration of the quality of services provided by the public health institutions because of the cutback in government expenditure on health. In addition, the introduction of charges on the publicly provided health services made the ratio of quality/cost in favors of the private services as the difference in cost was outweighed by the perceived high quality of the service provided by the private sector. Another factors contributed to the expansion of the private health facilities was the increasing demand for this service caused by the fact that, the treatment at private hospitals took some social dimensions, as people consider this a measure of the degree of care revealed by family members towards their sick relatives.(Elias,1999).

Also Babiker assumed that, the continuous decline of the real income of health personnel, like other governmental employees, induce them to shift to private practice where they could find better rewards.(Babiker 1996). Elias continue in this point and argued that:

The shift of doctors from work in public health institutions to private ones has its negative implications on the quality and adequacy of the services provided by those institutions. This situation has its negative impact on the consumers of health services in general and the poor in particular.(Elias,1999). Table (10) shows that the most common cases reported in the private health institutions in Khartoum state during 2006-2008.

Table 10: Cases Reported in the Private Health Institutions in Khartoum State(2006-08)

Year	Out-patients	Eyes	Big Surgery	Middle Surg	Small Surg	Labs
2006	174857	78657	5579	7322	23160	601377
2007	207143	198729	5882	7481	5276	1251133
2008	296865	101574	26721	8166	12733	1805282

Source: SMOH, Private Health Services Administration 2008.

The table indicates that, the cases treated in most of these types of services increased gradually during the period 2006-2008, which reflect the increasing demand for private health services.

Bayoumi in 2006, in a study submitted to WHO, using survey information has shown that: comparing the distribution of health facilities to public ones revealed that: the private sector share in these facilities amounted to the provision of between 14.3 percent of endoscopies to 58.3 percent of hospitals in Khartoum State. The contribution of the private sector in health facilities of Khartoum State during 2005 was an average of 24.3 percent. It is pertinent to note that the private sector had no contribution to rural areas, while it contributed 100 percent of urban full time clinics. See table (11)

Table 11: Distribution of health facilities by sector and type, Khartoum State, 2005

No.	Category of Facility	Number of facilities			Private Sector share (%)
		Total Number	Public Sector	Private sector	
1.	**Hospital**	91	43	48	58.3
2.	**Health centre**	200	144	56	28.0
3.	**Full time clinics**	199	-	199	100.0
4.	**Rural Dispensary**	183	183	-	0.0
5.	**Hospital bed**	7,436	6,146	1,290	17.3
6.	**Operation theatres**	101	61	40	39.6
7.	**Laboratory**	323	187	136	42.1
8.	**X-Ray unit**	55	35	20	36.3
9.	**Ultrasound**	44	24	20	45.4
10.	**ECG**	35	15	20	57.1
11.	**ECHO**	8	6	2	25.0
12.	**Endoscopy**	14	12	2	14.3
13.	**Pharmacy/Drug store**	538	126	412	76.6
	All	**9,227**	**6,982**	**2,245**	**24.3**

Source: Bayoumi 2006

Also the same study in comparing the distribution of private health manpower with the public one in Khartoum state revealed that: the private sector share in these categories of health manpower amounted to engaging of between 24.6 percent of specialists to 10.1 percent of the MOs in Khartoum State during 2005. In assistance of theses personnel and in comparison with the public sector, the private sector engaged other categories of health manpower in Khartoum State during 2005 that ranged between 5.7 percent of MWs to 61.3 percent of pharmacists. The contribution of the private sector in health personnel of Khartoum State during 2005 was an average of 15.1 percent.

Table 12: Distribution of health manpower by sector and category, Khartoum State, 2005

	Category of manpower employed	**Number of full-time employees**			**Private Sector share (%)**
		Total Number	**Public Sector**	**Private Sector**	
1.	**Specialists**	1,044	787	257	24.6
2.	**Registrar**	541	541	-	0.0
3.	**Medical Officer**	1,617	1,453	164	10.1
4.	**House Officer**	1,840	1,840	-	0.0
5.	**Dentist**	133	108	25	18.8
6.	**Pharmacist**	672	260	412	61.3
7.	**Technicians**	4,468	3,130	1,338	29.9
8.	**Medical Assistant**	2,360	1,922	438	8.6
9.	**Health Visitor**	197	197	-	0.0
10.	**Midwife**	2,333	2,201	132	5.7
11.	**Nurse**	4,571	4,325	246	5.4
12.	**Public Health Officer**	152	152	-	0.0
	All categories	**19,928**	**16,916**	**3,012**	**15.1**

Source: Bayoumi 2006.

4. Private Hospital Roles in Health Services Provision in the Sudan

4.1 Introduction

This section examines the existing role of private hospitals in the Sudan. Both primary and secondary data are used, primary data includes both questionnaire conducted with a 300 sample of patients in 15 private hospitals in Khartoum State, and an interview conducted with 20 key informants in private hospitals.

4.2 Questionnaire Analysis

4.2.1 Socio–Economic Characteristics of the Private Hospital Users

Of 300 private hospital users surveyed, 48 percent were male and 52 percent were female, so there is no sex difference between private hospitals users.

From table (13) it is clear that, 72 percent of the consumers resided in Khartoum state, 49 percent resided in Greater Khartoum itself, and 28 percent came from other states.

Table 13: Respondent's Resident

Residence	**Frequency**	**%**
Greater Khartoum	147	49
Greater Omdurman	39	13
Grater K. North	30	10
Other States	84	28
Total	300	100

Table (14) and (15) present the educational and occupational background of the respondents.

As table (14) shows, on the whole, around 90 percent of consumers who used private hospital were educated (primary, secondary, university and post studies). While only 10 percent were not educated.

Table 14: Education Level of Respondents

Level of education	**Frequency**	**%**
Primary	45	15%
Secondary	71	24%
University	132	44%
Post studies	22	7%
Illiterate	20	6%
Others	10	3%
Total	300	100%

As table (15) indicates, the self employed (62 percent) constituted the largest occupational group that used the private hospital services, followed by civil servants 28.3 percent.

Table 15: Levels of Occupations

Occupation	Frequency	%
Self employed	180	62
Civil servants	85	28.3
house wife	10	3.3
Student	10	3.3
Unemployed	7	2.3
Others	8	2.6
Total	300	100

4.2.2 Health Seeking Patterns of Respondents:

The majority of the respondents' residences are far from the hospitals (60 percent), which mainly related to the concentration of these hospitals in specific areas.

60 percent of respondents resorted to this hospital immediately after the feel of illness, while 30 percent after visiting public hospitals and less percent (10%) after visiting traditional practitioners.

Fifty- seven (57 percent) of the respondents surveyed were regular users of the private hospitals, 17 percent were first time. While 23 percent use private hospitals occasionally.

Table 16: Frequency of Using Private Hospital

Frequency of Using Private Hospitals	Frequency	%
Regular use	170	57%
Occasional use	70	23%
First use	50	17%
Others	10	3%
Total	300	100%

Table (17) shows that 55.3 percent of the respondents seeking treatment immediately after feeling ill ,while 21.3 percent after visiting traditional practitioners such as herbs which is the most widely used method.

Table 17: Seeking Treatment in Private Hospitals

Seeking Treatment	Frequency	%
Immediately after feeling illness	66	55.3%
After visiting public hospital	60	20%
After visiting traditional practitioner	64	21.3%
Others	10	3.3%
Total	300	100%

4.2.3 Respondents Perceptions towards Private Hospitals Services

Table (18) presents the reasons that respondent gave for their choice of private facility: 60 percent of the respondents said that they choose the facility, because the high quality of service in private facilities compared to public facilities .63percent choose the facility as a result of trust and confidence in private hospital, and 72 percent choose for the availability of excellent medical staff.

Table 18: Reasons for Respondents Choice of Private Hospital

Reasons for respondents choice	agree	%	disagree	%	Others	%
Quality of health service in private hospital compared to public hospital	180	60	90	30	30	10
Excellent medical staff	190	63.3	82	27.3	28	9.3
Trust and confidence in the services	216	72	47	15.6	37	12.3
Employer provided health service	140	47	160	53	00	00
Referral of doctors in public hospital	59	20	201	67	40	13
Friend & Neighbors advices	166	55.3	124	41.3	10	3.3

4.2.4 Respondent Perception towards Public Hospitals

Table (19) lists why respondents dislike public hospital:

Table 19: Reasons of Respondent Dislike Public Hospitals

Reasons of respondents dislike public Hospitals	agree	%	disagree	%	Other	%
Long waiting time	212	70.6	77	25.7	11	3.7
Overcrowding	196	65.3	90	30	14	4.7
Poor quality of services	201	67	85	28.3	14	4.7
High charges	88	29	200	66.6	12	4
Long distances	132	44	128	42.7	40	13.3
Lack of drugs	185	61.7	101	33.7	14	4.6
Non availabilities of physicians and consultancies	255	85	30	10	15	5

Table (19) shows that, 85 percent of respondent agreed that, they dislike public hospitals, because of non available of physicals and consultancies. 67 percent cited poor quality of services as a reason to dislike public hospital. Also respondents regard long-waiting time, overcrowding and lack of drugs our other factors were other factors responsible for dislike public hospitals.

4.2.5 Sufficiency of Income to the Cost of Services and other Measures Used

Table (20) presents respondent income levels.

Table 20: Respondents Monthly Income Levels

Income level	Frequency	%
Less than 500 SDG	12	4
From 500 – 1500 SDG	126	42
From 1500 – 2500 SDG	80	26.7
More than 2500 SDG	78	26
Others	4	1.3
Total	300	100

1 US $ equal 209 SDG in 2008, and 222 SDG in 2009. (www.bankofsudan.Org. 10-9-2009)

As table (20) shows, total monthly income varies but the majority (42 percent) of the respondents have a monthly income range from 500 –1500 SDG, while 26.7 percent from 1500 – 2500 SDG and 26 percent represents more than 2500 SDG. These percentages indicate medium and high income groups utilize private hospitals more than lower income groups. Table (21) indicates the quality of health services in private hospitals compared to its costs.

Table 21: Quality of Services Compared to Costs Paid

Quality of services compared to its cost	Frequency	%
Not good	30	10
Reasonable	60	20
Good	105	35
Excellent	105	35
Total	300	100

Table (15), indicates that 70 percent of respondents agreed that the quality of services in the private hospitals are good and excellent in compare to the costs paid, while 20 percent indicated that it is reasonable. Only 10 percent agreed that it is not good in compare to the costs paid.

Table 22: Is Income Sufficient to Use Private Hospitals?

Income sufficient to use private hospital	Frequency	%
Sufficient	102	34
Not sufficient	198	66
Total	300	100

Table (22), shows that the, majority of respondents (66 percent) said that their income is not sufficient to use private hospital, while 34 percent indicated that it is sufficient.

Table (23) present respondents perception when income is not sufficient to treat in private hospital, it clear from the table that, 65 percent and 60 percent of respondents respectively resort to credits from family, neighbors and friends and have support from expatriate, while 50 percent and 42 percent of respondents respectively resort to spend from additional income and selling some assets.

Table 23: Respondents Perception when Income is not sufficient to treat in Private Hospitals

Response of respondents when income is not sufficient to treat in private hospitals	Agree	%	Dis agree	%	Other	%
Support from expatriate	180	60	110	36.72	10	3.3
credits from family , neighbors and friends	194	65	94	31.3	12	4
Selling some assets	150	50	127	42.3	23	7.7
Spend from additional income	155	52.4	140	46.7	5	1.7

4.2.6 Difficulties Facing Respondents when Access to Private Hospitals

In dealing with difficulties facing private hospital users in access to hospital, table (24) shows that, the majority of respondents (61 percent) mentioned high charges while 23 percent 22 percent and 21 percent respectively indicated overcrowding of rooms , poor patient staff relationship , non–availability of medical staff and entries process.

Table 24: Difficulties facing respondents when Access to Private Hospitals

Difficulties facing respondents	**agree**	**%**	**Disagree**	**%**	**Other**	**%**
Entries process	63	21	230	76.7	7	2.3
Availability of medical staff	66	22	231	77	3	1
High charges	182	60.2	110	36.7	8	2.7
Overcrowding of rooms	180	60	114	38	6	2
Poor patient /staff relationship	70	23	225	75	15	5

4.2.7 Characteristic of Health Care Provision in Private Hospitals

Respondents cited availability of water , electricity and air conditions (91 percent of respondents) , quality of health care provided (89 percent) , cleanliness of rooms and toilets (84 percent) , excellent and suitable rooms (82 percent) and advance health equipments and machines (80 percent) are the most important consideration for choice of private health facility see (table 25) . In contrast about 60 percent of respondents mentioned that high charges and overcrowding of rooms as criticism facing private hospital users (see table 4.13).

Table 25: Characteristic of Health Care Provision in Private Hospitals

Characteristics Health Care Provided in Private Hospitals	agree	%	Dis-agree	%	Other	%
Cleanliness of toilets and bath rooms	252	84	40	13	8	3
Excellent and comfortable rooms	246	82	54	15	6	3
Availability of water, electricity and air condition	273	91	27	9	0	0%
Availability of good food and catering	213	71	75	25	12	4
Quality of health care provided	267	89	33	11	0	0%
Equipment and machines are advance modern	240	80	42	14	18	6

4.3 Analysis of Interviews:

The interviews conducted with 20 key informants and medical staff in private hospitals in Khartoum State, have shown that:

4.3.1 General Information about Interviewees

The average age of interviewees are about 46 years old, their work experience are of modest experience (5-10) years. The majority of interviewees holds post-graduate qualifications, but mainly related to specialization in medical field and not related to management of hospitals.

4.3.2 Basic Health Services Offered

Over 74 percent of interviewers surveyed said that they were involved in curative care and lees than 20 percent involved in preventive care. The majority of them offered the following basic health services: minor surgery, antenatal care, post–natal care, deliveries and less of them provide major surgery. Private hospitals involvement in preventive care includes immunization and family planning.

4.3.3 Distribution of Private Hospitals

Over 85% of respondents interviewed, have shown that the concentration of private hospitals are mainly in urban areas and very few of private hospital are located in the rural areas.

4.3.4 The Role of Private Hospitals in Providing Health Facilities in the Sudan

All of the respondents agreed that private hospitals play a significant role in health service provision in the Sudan, mainly through creating suitable health environment to work (equipments, machines, and national and foreigners experts) and providing quality of care.

4.3.5 Strength and Constraints of Private Hospitals Business

More than 90 percent of the interviewers considered that the major strength of private hospitals are: provision of quality services based on reliable medical staffs, also comfortable environment for the patients, where 80 percent considered good management which resulted in solving patients problems and making access to these services easily.

The major constraints perceived by private hospital vary among the respondents, but most of them agreed upon the following.

- Absence of direct support by the government to this type of important investment.
- Weaken regulatory framework of the private hospitals by MOH, resulted in bad reputation of private hospital in medical faults.
- Heavy taxes and different fees should be paid by private hospitals.
- Difficulties of credit facilities by financial institutions.
- Bureaucracy and constraint facing imports of health equipments and machines.

4.3.6 The Relationship between Public and Private Health Providers in Sudan

Over 70 percent of the interviewees agreed that the relationship between public and private hospitals are complementary type of relationship , where the private hospitals provide some health services which is not available in public services because it needs some requirements. But the deterioration of the environment induces some health staffs to shift to private providers where they find better environment and rewards. This situation resulted in increasing the deterioration health services provided by public hospital.

4.3.7 What Private Hospitals Required Improving their Facilities?

- More than 85% of respondents proposed a direct support from the government to promote their participation in health facilities such as reducing taxes and fees and provide exemptions and fewer fees in importing medical supplies and equipments.
- Also over 70% of responded call for changing finance and credit policies so as to make access to credit and capital easily.
- Provide training and further studies to practitioner.

- Development of policies and regulations by MOH to ensure the provision of perfect health service by private hospital.

5. Conclusion, Findings and Recommendations

5.1 Introduction

This section presents the summary of the study and the findings and results obtained then it draws some recommendations.

5.2 Conclusion

The study aims at investigating the potentialities of private health services and its role in the provision of health services in Sudan, taking private hospitals as an example of private health services. Specifically the study aims at evaluation the importance of private hospital services in delivering heath services and to show what factor induce people to use private hospitals and to explain the main difficulties that face private hospitals. Both primary and secondary sources of data have been used in the study. Secondary data were obtained from literatures, reports and statistics of MOH. Primary data was collected through a set of questionnaire with patients in public hospitals and interview with key informants in some public hospitals.

5.3 Findings

The study reached the following results:

- Private health care provision is growing in Sudan, and private hospitals play a significant role in providing health services .The total number of private hospitals in Khartoum state reached 98 hospitals in 2009.
- The concentration of private hospitals are not balanced, they are mainly suited in the city center and some affluent areas without consideration to population density and shortage of care.
- The poor and middle income groups, as well as the rich group, sometimes seek health care from private providers, but they are mainly insured or covered by their employees.
- Private hospitals services are mainly oriented towards curative services with a small contribution to some preventive services such as immunization and family planning.

- The major strength of private hospitals is: provision of quality services with reliable support staff, comfortable environment for the patients with a good management.
- The major constraints facing private hospitals are: absence of direct support by the government to this type of investment, weaken regulatory role by MOH, and heavy taxes and fees imposed by the government.
- Regarding health seeking behavior of consumers of private hospitals, the study showed that: the majority of consumers resorted to this hospitals immediately after feeling of illness and after visiting public hospitals and less of them after visiting traditional practitioners.
- The MOH regulatory and legislative role towards private hospitals is still inadequate, dealing mainly with the most basic requirements, such as practice entry and facility registration, but no effective continuous assessment to the type, quality and prices of the services rendered by private hospitals.

5.4 Recommendations

To improve the role of private hospitals in health services provision in the Sudan, the study suggested that:

- The government should assist private hospitals services to increase their provision of services , and this can be through:
    - Provide some incentives in Investment Act to support private hospitals. Such as:

      1- Reducing taxes and fees imposed.

      2- Offering easy procedures relating to imports of health requirements and machines and some necessary drugs.
- Widening access to private hospitals facilities by ensuring non-exploitive prices.
- Rising community awareness through active media and consumer organizations to help the user of private hospitals in recognizing their demand of services at higher quality levels with fewer faults.
- Induce public hospitals to provide some private services with reasonable costs and high quality of services under the direct supervision and support of MOH, so as to increase competition with private hospitals to increase quality and efficiency in both of them.

- With respect to the cost and quality of health services provided in private hospitals, information on prices and type for essentials drugs, clinical procedures and investigations are needed to increase MOH regulatory and legislative framework.
- MOH should introduce accreditation measures to monitor the services offered by private hospitals providers against agreed quality standards, and high levels of capability are required for accrediting bodies.
- Private – public partnerships are proposed to introduce some equilibrium in the provision of preventive and curative health services.
- The study urges that further research be conducted on the role of different private health services on the preventive and curative care and their impact on the provision of health services in the Sudan.

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Annex A. Questionnaire: Consumers of Private Sector Medical Practitioners

The objective of this questionnaire is to solicit the views of users of the services of private health providers on the factors which influence their demand and on the quality of services they have received

1. Personal Data on Respondent
1.1 Sex: 1. Male ( ) 2. Female ( )
1.2 Educational level: 1. Illiterate ( ) 2. Primary ( ) 3. Secondary ( ) 4. University( ) 5.post-studies( ) 6. other( )
1.3 Occupation ( )
1. Civil/Public servant ( )
2. Self-employed ( )
3. Housewife ( )
4. Unemployed ( )
5. Student ( )
6. Retired ( )
7. Others ( )

1.4 Monthly Income Level:
1. Less than 500 SDG ( ) 2. From 500- 1500 SDG ( )
3. From 1500- 2500 SDG ( ) 4. More than 2500 SDG ( )

1.5 Residence:
1. Greater Khartoum ( ) 2. Greater Omdurman ( )
3. Greater Khartoum-North ( ) 4. Others States ( )

2. When you seeking treatment in private hospitals
1. Regular use ( )
2. Occasional use ( )
3. First time use ( )
4. Others ( )

3. What reasons for choosing private hospitals?

	Reason	**Agree**	**%**	**Disagree**	**%**	**other**	**%**
1	Quality of health services in private hospitals compared to public hospitals						
2	Trust and confidence in the services						
3	Excellent medical and health staff						
4	Employer converging health services						
5	Referral of doctors in public hospitals						
6	Friends and neighbors advices						

4. Why you didn't choose public hospitals?

	Reasons	Agree	%	Disagree	%	other	%
1	Long-waiting time						
2	Overcrowding						
3	Poor quality						
4	High charges						
5	Long distances						
6	Lack of drugs						
7	Non-availability of physicians & consultancies						

5. Quality of health services compared to its costs

1. Not good ( ). 2. Reasonable ( ). 3. Good ( ) 4. Excellent ( )

6- Is your income sufficient enough to use private hospitals?

1. Sufficient ( ) 2. Not sufficient ( ) 3. Other (specify) ( ).

7. What did you do when income is not sufficient enough to satisfy your costs in private hospitals?

	When income is not sufficient i	Agree	%	Disagree	%	other	%
1	Have a support from expatriate						
2	Have credits from family, friends, and neighbors						
3	Sell some assets						
4	Spend from additional and saving income						

8. Difficulties facing you when you when you access to private hospitals:

	Difficulties facing when access to private hospitals	Agree	%	Disagree	%	other	%
1	Entry process						
2	Availability of medical staff						
3	High charges						
4	Overcrowding of rooms						
5	Poor patient/staff relationship						

9. Characteristics of health services provided in private hospitals

	Characteristics of health services	Agree	%	Disagree	%	other	%
1	Cleanliness of toilets and bath rooms						
2	Excellent &comfortable rooms						
3	Availability of water, electricity and air condition						
4	Availability of good food and catering services						
5	Quality of health care provided						
6	Equipment and machines are advances and modern						

Annex B. Interviews with some key informants in private hospitals

The objective of this questionnaire is to identify the views of some of the key informants in some of the private hospitals, generally on the role of the private hospitals and on the strength and constraints facing private hospitals.

1. **General information about interviewees.**
   -Age………………………………………………………………………………..
   -work experience…………………………………………………………………..
   -education…………………………………………………………………………..

2. **What are the basic health services offered by the hospital?**
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   ………………………………………………………………………………………
   ………………………………………………………………………………………

3. **What do you think about the distribution of private hospitals in Khartoum State?**

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4. **Specify the role of private hospitals in the provision of health services in the Sudan.**
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5. **What are the strength and constraints facing private hospital business?**
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   ………………………………………………………………………………………
   ………………………………………………………………………………………

6. **Specify the relationship between public and private health providers in the Sudan.**
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7. **Inorder to improve their facilities, explain what private hospitals required?**
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