

# Healthcare delivery Systems in Sudan – An Overview

By

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## Introduction

As a Sudanese healthcare worker trained in Sudan and now living abroad, I, as well as I am sure you, have constantly being burdened by the deteriorating healthcare delivery in Sudan. Over the years in our own ways, we have constantly being trying to find different ways to support our fellow country men and women back home. This has mainly being on ad hoc basis and had limited and only short term effect. It became increasingly clear that what is needed is a systematic approach to the whole health system in Sudan.

Through the Sudanese Doctors Union here in the United Kingdom & Ireland (SDU-UK&I) we have initiated active engagement and dialogue for almost two years now with the Specialist Associations in the Sudan (SAS) and the Federal Ministry of Health. Our collective vision is to have a health care system that addresses the physical, mental and social needs of the individual and an environment that caters for the dignity of both the patient and the doctor.

In this period, the union successfully organised three conferences, two in England and one in Dublin-Ireland, with the intention to involve all the stakeholders and to prepare for a National Conference in Sudan that could help in implementing our vision. The objectives were:

- To identify the failures & short comings in the current system and to propose viable solutions
- To strengthen & consolidate the role of the professional organisations & institutions
- To rally the support of the medical profession, the public, the media, the civic society organisations and the political parties across the spectrum to ensure implementing

These meeting were well attended mainly by doctors living in the United Kingdom & Ireland as well as representatives from SAS, the Federal Minister of Health Dr Tabita Shoki and delegates from the MoH.

In order to fulfil our vision and to achieve our objectives, we needed to focus on certain areas that are essential in any proper health system and are related to work of the union. These areas were:

- The Undergraduate Education & Internship training in the Sudan.
- The doctor's Career Structure & Professional Development.
- The Healthcare Delivery Systems.
- The Health Regulations & Governance.

I was involved in organising a workshop addressing the Health problems in Sudan and how to deliver the care for the whole country with its diverse demography, extreme climates and vast geography.

Our main aim at the workshop was to draw up a strategy that assists in developing health care delivery systems that are accessible, equitable, affordable and sustainable.

### **Background**

Sudan is the largest country in Africa with an area almost equalling the size of Western Europe. Its climate ranges from damp rainy in the South to desert in the northern areas creating an ideal environment spreading communicable diseases with their known devastating effects. The social and political situation in Sudan over the last 50 years did not help either. Sudan has suffered from civil war in southern Sudan for much of the period since independence. Only in 2005 a peace agreement was signed with the South and only recently with the East. The Civil conflict in Darfur in the West is still unresolved and is currently raising a lot of concerns from the international community.

The effect of war and years of lack of funding and systematic dismantling of the public services and the infrastructure naturally led to deterioration in the economy and on the community development as well as the quality of the health services. This resulted in widespread poverty, unhygienic living conditions, malnutrition, illiteracy and poor access to clean water and proper sanitation.

You might be surprised to know that in Sudan today there is still a wide variation in the supply of clean water. Only 5% of the people living in Malakal today have access to clean water and up to 92% in Khartoum. The same applies for environmental sanitation and access to sewage disposal, 29% in Malakal and 79% in Khartoum.<sup>5</sup>

Illiteracy is a chronic problem in Sudan with 50% of the population today is still illiterate with male to female ratio stands at 2:3.

In spite of the government's claims, Sudan is still one of the under growth countries in the world, it is ranked:

- 141 out of 177 on the Human Development Index.
- 154 in WHO 2000 report for status of health.

- 45.5 rank by under 5 mortality 116000/year.
- 116 out of 146 in UNDP gender index ranking.

You might remember that in 1978, the Blue Nile project managed to successfully control malaria dropping its prevalence to less than 1%. This programme stopped in 1989 resulting in the surge of this pre-historic disease with its devastating results. The problem is now more complex with the resistance of the parasite to Chloroquine and the vector to the insecticides. The recent environmental and social conditions like famine, drought, flooding, civil war and extensive irrigated schemes complicated matters further.

Today in Sudan, Malaria is: <sup>7</sup>

- Responsible for 20-40% outpatient consultations & 30% of inpatient admissions & 16% hospital death in north.
- 75% of population at risk of endemic malaria & 25% of epidemic malaria.
- 21% of under 5 had fever in last two weeks (indicator for malaria in endemic areas).
- 7,500,000 new cases each year 50% EMR load.
- A significant cause for maternal and newborn morbidity and mortality.

Other communicable diseases and malnutrient are endemic in Sudan needing urgent attention, proper planning and effective management.

Sadly we still have one of the worst statistics in the world when it comes to our infants' morbidity and mortality. The Infant Mortality rate in the North is 68 per 1000 life birth, and 150/1000 LB in the South. The under 5 MR is 102/1000 LB in the North and 250/1000 LB in the South.<sup>9</sup>

Sudan has one of the worst Maternal Mortality Rates (MMR) as well. In 1999 it was estimated at 507 per 100,000 in the North and 1,700 per 100,000 in the South. These figures are likely to have increased since.<sup>7</sup>

Today in Sudan less than 70% of expectant mothers have access to some form of Antenatal Care (ANC), 43% of the villages have Midwives and only 25% of the hospitals have some form of obstetric related emergency equipments.

Practically most of the life threatening obstetric complications can be predicted and prevented successfully. In the UK, the MMR dropped significantly with the introduction of proper ANC in the 1920s and further more in the 40s after the Antibiotics and banked blood facilities.<sup>8</sup>

Since 1994 the government adopted the federal system of health. The country is now divided into 26 states and 134 localities. The system is characterised by a multi-tier government, federal, state and local governments. The federal level is concerned with the policy making, planning, supervision and co-ordination while the state government

concentrate on the planning and implementation at the state level. This strategy would have worked if there was even distribution of the financial resources and manpower between states and between rural and urban areas and less deal of bureaucracy and work duplication which is unfortunately seems to be the current practice.

The government claims that its intention is to have a free on the point of delivery service. This same government did inherit a National Health Service which was free on the point for delivery. It was however, instrumental in changing the landscape of the health delivery in Sudan. There has been serious deterioration in the quality of the public services and it started to charge the patient for the poor services delivered from its poorer facilities.<sup>11</sup>

The government health facilities in Sudan 1994 – 2000

<b>Health facility</b>	<b>1994</b>	<b>1997</b>	<b>2000</b>
<b>Primary health care unit</b>	3,070	2,749	2,558
<b>Dressing station</b>	1,412	1,442	1,236
<b>Dispensary</b>	1,400	1,468	1,475
<b>Health centre</b>	531	693	915
<b>General or rural hospital</b>	162	186	200
<b>Provisional, specialised, or teaching hospital</b>	78	88	109

The service for profit sector gradually expanded to fill the gap. It is now the main way of healthcare delivery in Sudan. Medicine became an expensive commodity that is not affordable to the majority of the people. More so, with the lack of accountable and transparent regulatory bodies, the State and Private health systems, deteriorated even further and completely lost the patients' confidence in them.

### **Funding**

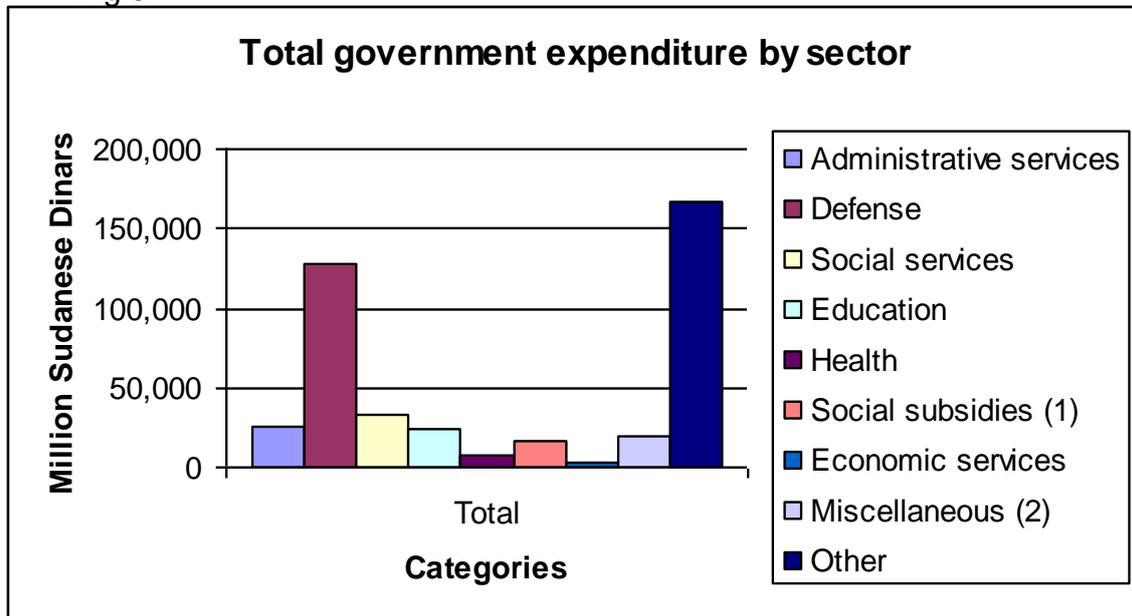
Since the commencement of the oil pumping in Sudan (current daily production of 500,000 barrels rising to 1 million barrels by 2008), the gross national income (GNDP) of the country rose from 8.2 billion US\$ in 1994 to 18.7 billion US\$ in 2004, yet our nation's health is still far from the international average figures.<sup>4</sup>

Selected world development indicators in some countries (2003)

<b>Country</b>	<b>GNI per capita in US\$</b>	<b>Life expectancy</b>	<b>Population (million)</b>
World	5552	66	6289.8
Ireland	27,430	78	3.99
Jordan	1,940	72	5.3
<b>Sudan</b>	<b>440</b>	<b>56</b>	<b>34.9</b>
Kenya	430	48	32.7
Nigeria	380	43	125.9

As you can see in Fig 5, the bulk of the government's expenditure is dedicated to security (other), defense 40%, and 70% on operation and maintenance. The actual public expenditure on health and other social services is one of the lowest, only 2-3% of government expenditure.<sup>7</sup>

Fig 5



It is the government's responsibility to estimate accurately the national burden of disease and looks into ways of providing it. This might include partnership with the private sectors and the NGOs in certain areas and for certain conditions.

### The Healthcare Delivery Systems Workshop

The workshop was well attended by doctors, educators, journalists, and service developers. Over five hours the delegates discussed constructively and passionately the related areas and came up with the following conclusions:

- Health is a Human Right and it is not a commodity.
- To consider the reactivation and implementation of the health policies that existed up till 20 years ago.
- To demand Political Commitment to the Public Health agenda and Care Provision.
- To spend on health in relation to Gross National Income.
- To have democratically elected bodies to ensure Accountability and Transparency.
- To have a Fully Elected Sudan Doctors Union.
- To respond to the country's needs and develop a community based, population oriented system.
- To demand state funding for emergency, maternity and children's care.
- To address the issue of funding for healthcare by exploring partnerships with the private sectors and the NGOs.

- To activate and reform of the Health Governing Laws to reflect the recent Political and Socio-economic Developments in Sudan
- To amend the laws to enable freedom of expression
- To urgently regulate the private sector demanding better value for money, evidence-based care pathways and robust quality assurances.
- To independently evaluate the new private schemes like Takaful & Diwan Al-Zakat
- To evaluate the quality of the new graduates and their performance & distribution
- To address the issue of unemployment between Healthcare workers, their career pathways, remuneration and migration.

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- State funding for Children's and Maternity care
- Funding:
  - Partnership with the Private Sector & NGOs
  - Community financing schemes
  - Risk-sharing strategies including compulsory insurances
  - User fees
  - Tax finance concentrated on the poorest
- Care pathways & Evidence-based practice
- Chronic disease management in Primary Care settings
- Control of financing and prioritisation of expenditure

### PrivaTE

- Not to substitute the State's responsibility towards Healthcare delivery
- Regulation, Governance & Transparency
- Evidence-based care pathways & robust quality assurances
- To ensure good value for money
- To broaden the providers mix and stimulate competition
- Utilisation of public-private initiatives appropriately

### HR

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- To consider the community needs in our planning and strategic development
- Needs and demands for Manpower and address the issue of Unemployment
- Training and motivation of Workforce

### Implementation

- Promotion of health education through schools
- No restrictions on media coverage of health issues

- Constitution Amendment Committee
- Unions and Associations

### The way forward

- The name of the game looks like to “Go back to basics”. This ought to be with increase response to local concerns and needs with community representation.
- A community based, population oriented, disease prevention, control and health protection services benefiting everyone and accessible to all.
- This in turn will create a health information system capable of providing information needed for decision making, health management, clinical practice, public education, early warning systems and active surveillance.
- To be aware of the system user’s needs, concerns and expectations and use the most appropriate mode of delivery.
- To look into the socio-economic factors and to efficiently utilise the available resources.
- To look into different forms of funding for the services.
  - The State to fund primary care and emergency services with partnership with the private sectors and NGOs for secondary and tertiary care.
  - Tax finance concentrated on the poorest.
  - Community financing schemes.
  - Risk-sharing strategies including compulsory insurance.
  - User fees, etc.....
- To regulate the private sector:
  - To regulate the licensing procedure.
  - To demand a system of governance and accountability framework with complete transparency.
  - To ensure good value for money.
  - To broaden the providers mix and stimulate the competition between them.
  - To demand evidence-based patient’s pathways and robust quality assurances.
  - To independently evaluate the new financial schemes like Takaful, Diwan Al Zakat and other national and private insurance schemes.
- To address the issue of human resources:
  - To evaluate the quality of the medical schools’ graduates and their performance and distribution.
  - To look into the current state of unemployment between the doctors and other healthcare workers.
  - To address the issue of the career pathway, the remuneration and migration outside Sudan.
  - To consider the community needs in our planning and strategic development.
- To be in a position to effectively advice and support the policy-makers, to protect the interest of the public and to ensure the ethics and the dignity of the profession and the doctors, we need to have systems that regulate, monitor, supervise, support and facilitate the services. Systems that are independent, transparent and accountable.

- There is an urgent and real need for governmental commitment and leadership to drive the public health agenda.
- Proper commitment to international & global constitutions and programmes; the Millennium Declaration in the fight against poverty, illiteracy, hunger and other determinants of health.
- To review the health legislation to satisfy the new health systems including the federal one.

### **References**

1. Medical Services in Sudan Conference, SDU (UK&I), a flyer, Sept 2006.
2. The SDU (UK&I) president's speech at the Birmingham Conference, April 2006.
3. The SDU (UK&I) recommendations to the Federal Minister of Health, Sudan, April 2006.
4. The World Development Indicators Database, April 2006.
5. An Overview of the Health Status in Sudan, Dr Huda H Mohamed, Consultant in Public Health, El-Hikmah, August 2004.
6. World Development Report, 1993.
7. Prof I. Abdel Rahim, The post conflict health challenges in Sudan, a presentation, SDU (UK&I) conference, Birmingham, UK, April 2006.
8. Dr Hani Fawzi, Consultant Obstetric and Gynaecology and Honorary Consultant in Public Health, a presentation, SDU (UK&I) conference, Birmingham, UK, April 2006.
9. Dr Seif Babiker, Consultant Paediatrician, a presentation, SDU (UK&I) conference, Birmingham, UK, April 2006.
10. Dr Huda H Mohamed, Consultant in Public Health, a presentation, SDU (UK&I) conference, Birmingham, UK, April 2006.
11. Dr Tabita Shoki, FMOH, Republic of the Sudan, Health services in the Sudan after the peace accord, a presentation, SDU (UK&I) conference, Birmingham, UK, April 2006.
12. OECD Health Indicators 2005, executive report 2005, health at a glance, ISBN-92-64-01262-1.
13. WHO Atlas Data, 2004.

