

## **Funding Renal Care in Nigeria: A Critical Appraisal**

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### **ABSTRACT**

There is no longer any doubt that renal failure is prevalent in Nigeria and just like the trend elsewhere, the incidence is rising annually. This rising prevalence also extrapolates to large amounts of funds for renal care. The burden of renal care is so enormous that no single individual or family can sustain any patient on treatment for renal failure for a reasonable length of time and this results in death and poor quality of life before they succumb.

Renal care is expensive worldwide. In the United States of America (USA) the total cost for Medicare patients with ESRD in 1998 was \$12.04 billion. Likewise in 1991 the Saudi Arabian government with an oil economy like Nigeria, spent the equivalent of \$19,363.14/patient/year for haemodialysis (HD). The story is the same in Nigeria where the cost of HD is at least N958,000.00/patient/year.

Cost of kidney transplantation varies from between N740, 000.00 – N3.2 million depending on center being patronised. These amounts of money for renal care are out of the reach of most Nigerians. The reality is that only the very rich and those whose medical expenses are paid for by their employers are able to sustain HD for reasonable periods of time or are able to afford kidney transplant.

CRF/ESRD is prevalent in Nigeria. Its treatment is expensive and as at today majority of Nigerians, bears the cost of their renal care. In the face of high poverty rate and the resultant inability to maintain treatment options for more than a few months, countless lives have been lost. Many Nigerians in the productive age have died of kidney failure. To avert this trend the NAN needs to play a more visible role to reduce the increasing burden of ESRD, emphasis needs now to be placed on preventive nephrology.

### **INTRODUCTION**

There is no longer any doubt that renal failure is prevalent in Nigeria and just like the trend elsewhere, the incidence is rising annually. This rising prevalence also extrapolates to large amounts of funds for renal care. The burden of renal care is so enormous that no single individual or family can sustain any patient on treatment for renal failure for a reasonable length of time and this results in death and poor quality of life before they succumb. All involved in management of patients with kidney disease are quite bothered about this state of affairs. Of course, funding is the bottom line because without funds we cannot move ahead in making remarkable change/improvements in renal care in Nigeria.

### **Why is funding for renal care important?**

Several reasons abound why funding for renal care is of paramount importance in present day Nigeria. For one chronic kidney disease (CKD) is prevalent in Nigeria. Although there are no available national statistics, chronic renal failure (CRF) accounts for 1.6%-8% of hospital admissions to medical wards [1, 2]. Morbidity and mortality rates amongst patients with CRF are quite high. CRF accounts for disruption in family, work, social activities and renal disease has been reported to account for 11.4% of deaths in the medical wards of a tertiary health institution in Nigeria [3, 4]. The situation is so bleak because facilities for management of CRF are scarce, expensive and unaffordable for majority of Nigerians.

CRF is more prevalent in the productive age range of 20-50 years and these patients die because they cannot afford treatment. Thus there is an avoidable wastage of lives that otherwise would have contributed to the economic growth of Nigeria.

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Medicare patients with ESRD in 1998 was \$12.04 billion. ESRD during the same year was 0.7% of the Medicare population, but consumed approximately 5% of the annual Medicare budget. Treatment of patients outside the Medicare system cost \$4.7 billion in 1999 and it has been projected that if the current trend of the rising prevalence of ESRD continues, the ESRD programme will cost Medicare \$28.3 billion by 2010[4, 5]. Likewise in 1991 the Saudi Arabian government with an oil economy like Nigeria, spent the equivalent of \$19,363.14/patient/year for haemodialysis (HD) [7]. The story is the same in Nigeria where the cost of HD is at least N958,000.00 (\$7,100.00)/patient/year.

### What is the current cost of renal care in Nigeria?

The treatment options for patients with end-stage renal disease (ESRD) are dialysis (HD or peritoneal dialysis) and renal transplantation. Majority of centres that provide renal care in Nigeria offer HD and a few intermittent peritoneal dialysis. To my knowledge no centre offers any other form of peritoneal dialysis while three centres (one private and 2 government facilities) offer kidney transplantation. Table 1 shows the average cost for a patient undergoing HD/year in some Renal Centres in Nigeria. To have HD in a government hospital in

Nigeria for one year, at a rate of two HD sessions/week, a patient will require between N958, 000.00 and N1, 757,000.00 excluding drugs. There is no data on cost of the different forms of peritoneal dialysis except for intermittent peritoneal dialysis (IPD). IPD costs between N14, 000.00 and N23, 500 for 4-5 cycles/day, cost of investigations inclusive. Cost of kidney transplantation varies from between N740, 000.00 – N3.2 million depending on centers being patronised. These amounts of money for renal care are out of the reach of most Nigerians. The reality is that only the very rich and those whose medical expenses are paid for by their employers are able to sustain HD for reasonable periods of time or are able to afford kidney transplant.

Our experience in the Renal Unit at the University of Benin Teaching Hospital in 2004 revealed that a total of 91 patients had HD in the Centre for CRF. They were aged between 17- 76 years and 64% were aged between 20-50 years. The range of HD sessions was between 1-23, 85% dialysed for 1-2 months and 15% dialysed for >2 months. Our experience is that patient is admitted very ill and at this point relations are willing to go to any length to provide funds for dialysis. At this initial meeting, relations tell you "Doctor do everything possible, we will go discuss with everyone

**Table 1: Cost of Renal Care in Some Hospitals in Nigeria**

ITEMS	Average cost (in naira)/year			
	UCH	OAUTHC	JUTH	UBTH
First HD	20, 000	15, 000	12, 000	17, 000
Subsequent HD at 2 sessions/wk	520,000	936, 000	520, 000	832, 000
Investigations before first HD	5, 000	6, 000	7, 000	8, 350
Subsequent investigations	39, 000	104, 000	38, 400	52, 800
Medications	62, 400	108, 000	?	73, 840
Blood Transfusion and Erythropoietin	324, 000	804, 000	696, 000	435, 000
TOTAL	970, 400	1, 973, 000	1, 273, 400*	1, 418, 990
	908, 000*	1, 865, 000*		1, 345, 150*

*Intermittent peritoneal dialysis costs N14, 000 – N23, 500 for 4-5 cycles/day (including investigations)*

*Kidney Transplantation costs between N740, 000 – N3.2 million for first year.*

*\*Total cost excluding medications*

*HD = Haemodialysis*

*UCH = University College Hospital, Ibadan*

*OAUTHC = Obafemi Awolowo University Teaching Hospital, Ile-Ife*

*JUTH = Jos University Teaching Hospital, Jos*

*UBTH = University of Benin Teaching Hospital, Benin City*

in the family; go ahead we will pay". Relatives come back with funds for first session of HD, possibly second and third sessions. Thereafter, dialysis is done only when money is available and when patient can no longer cope with symptoms. Some have been known to sell all their properties for dialysis. With each passing week the interval between dialysis increases until they drop out of the HD programme completely. From all the foregoing, it is obvious that something has to be done to improve funding of renal care in Nigeria if deaths due to ESRD and frustration of renal care providers are to be reduced.

### Funding for Health Care

There are funding options available for any health care delivery system worldwide[8]. These include:

- Government revenue at the different levels (e.g. national, state and local government levels).
- Direct payment by patients
- Health insurance. This can be in the form of:
  - (i.) Compulsory health insurance or social security
  - (ii.) Private insurance
  - (iii.) Managed care with Health Maintenance Organisations (HMOs) and the providers playing the major role.
- Community, employer and other voluntary local financing:
  - a. Private voluntary (NGOs)
  - b. Co-operatives
  - c. Employer-provided health care
- Donor financing
- Development loans from
  - i. World Bank
  - ii. Regional development loans.

Most of these options are operative in Nigeria but whether they are well operated or not is the question.

### Health Care Funding in Nigeria so Far

Funding for health care in Nigeria involves both government and non-governmental bodies. Funding bodies include:

- **Government**
  - i) The local government authorities are responsible for funding Primary Health Care Centres.
  - ii) State governments fund General Hospitals. Comprehensive Health Care

Centre and render secondary health care.  
 iii) Federal government of Nigeria (FGN) funds the Tertiary and Specialist Hospitals and render tertiary health care.

- Private funding
- Health insurance companies. This plays a major role in health care in developed countries but this mode of funding is still evolving in Nigeria.
- Foreign Aid from foreign governments, religious bodies, private companies and other non-governmental organisations (NGOs).

In 2003 FGN allocated 3% of the national budget to health despite the fact that World Health Organisation stipulates that 5% of a country's national budget should be for health [9]. Thus by and large the sick Nigerian has to pay his/her medical bills except in a few states where health care is subsidized to some extent by state governments. Several reports have shown that many Nigerians live below the poverty line of <\$1/day[10]. It appears, therefore, that payment by patients is not feasible for many. Due to the large sums of money involved in renal care, only the very rich and the multi-national companies can afford to provide renal care for themselves and their employers respectively. Most co-operatives and other grades of employers in Nigeria as they operate now, are unable to get involved in capital-intensive health care schemes.

To my knowledge loans from World Bank and development banks are mostly for infrastructure and development projects.

It is possible for NGOs to get involved in renal care but the magnitude of funds involved in renal care is likely to be a handicap for NGOs that want to provide renal care funding. Foreign aid is a major contributor to health care in many regions. It accounts for 20-30% of health expenditure in many African and Asian countries[8]. For example, leprosy care in some Nigerian states is sustained by aid from the German Leprosy Relief Association. On the other hand possible extension of foreign aids to renal care funding is doubtful or at the best is likely to be very minimal because industrialised countries are now contending with increasing prevalence of CKD and rising costs of treatment [4, 5].

The options, which appear feasible for now, are funding by government and through health insurance programme. The National Health Insur-

ance Scheme (NHIS) is a corporate body that was established under Act 35, 1999 following a report of the Special Committee on the NHIS. The body was established for the purpose of providing health insurance, which shall entitle insured persons and their dependants to the benefit of prescribed good quality and cost effective health services[11]. NHIS operational guidelines include operating the health insurance schemes, registration of Health Maintenance Organisations (HMOs) and health care providers (HCPs) and ensuring that these bodies maintain the guidelines for the scheme. The HMOs are meant to pay capitation fees/fees for service to HCPs for those who are registered with them. The NHIS coverage, as it is enacted, includes consultation, fees for maternity care, preventive care such as immunisation, family planning, prescribed drugs, diagnostic tests and consultation with defined range of specialists. It, however, does not cover chronic illness (like CRF) and other capital-intensive illnesses. Thus it seems that the NHIS will work beautifully for those in government service and the organized work force where health insurance funds can be deducted from source. For a good proportion of Nigerians like artisans, traders, market women who are not in organised work force to benefit from NHIS, they are expected to form cooperatives that can buy policies from HMOs. Unfortunately the amount of funds required for renal care falls into the category of fee for service and the kind of policy that cooperatives above can buy are unlikely to be big enough to cover renal care. Hence, it seems unlikely that the NHIS, in its present state, will fully solve the funding problem for renal care except if there is a special provision for renal care funding in the NHIS and for renal care to be included amongst range of specialist care covered by NHIS. The Nigerian Association of Nephrology (NAN) can lobby for this kind of position.

### **Lessons to Learn From other Countries**

If the Nigerian government is willing to fund renal care, we can learn one or two lessons from other countries where governments are involved in renal care funding. In 1972, USA extended Medicare coverage to persons with CRF [12]. To be eligible for ESRD treatment under Medicare you must be "fully or currently insured" under Social Security; have a diagnosis of CRF and have applied for benefits or be the "spouse or dependent child" of such a person [13]. Initially only those < 65 years old qualified but the original statute was amended to cover all ages. An

individual in the USA who is diagnosed with ESRD is guaranteed dialysis and treatment as long as he has paid into the Social Security system. This coverage is guaranteed as long as the individual remains a US citizen. Drugs which improve the care and quality of life (QOL) for dialysis patients are paid for by Medicare. Such drugs include erythropoietin, vitamin D therapies, and intravenous iron. For those that have transplant, Medicare covers drugs for such only for a limited period of 3 years. Such an individual is responsible for the cost of drugs thereafter. Complaints against this system are that it does not take into consideration annual inflation, changes in technology, labour and other input changes such as salary increases[14]. Also, because federal legislation in required most of the time for changes to be made to the ESRD programme, such changes become political issues resulting in no changes been made for so many years. To avoid these sort of delays, it has been suggested that politicians and legislation be removed from funding of dialysis treatments. It is suggested that a body or office outside government should manage the disease process, distribute funds for prevention, treatment, transplantation, and research for cures of kidney diseases. It is also suggested that a Nephrologist should head such a body but that he should have a Masters in Business administration or be a medical economist [15]. This office, it is hoped, will be able to make quick decisions and significantly reduce cost of drugs. The Medicare model is a workable option for the organised workforce in Nigeria as this group of people are the ones that can easily fit into the NHIS.

In England and Wales the National Health Service (NHS) provides dialysis and transplantation for all citizens. The major set back of this scheme is that because every citizen is eligible there is a long waiting period. This model is the realistic one for the unemployed.

In the Kingdom of Saudi Arabia, a developing country with an oil economy like Nigeria, renal replacement therapy is free to all citizens of the Kingdom. This programme works and is a feasible option for Nigerian.

It is envisaged that a funding system that incorporates both the Medicare and NHS models is probably the one that will ensure funding for every Nigerian with the FGN fully funding renal care for the unemployed and the NHIS for the employed.

Whichever model of funding is advocated for

Nigerians, NAN needs to advise on who benefits from government based renal care funding. The government will need to be directed by NAN and answer such questions as:

- Should the elderly (>65 years) who most time have multisystem disease benefit?
- Should patients with other comorbid conditions benefit?
- Should government funding continue after transplant and for how long? In the American model immunosuppressives are supplied free for a limited period after transplant. With the depth of poverty in Nigeria such a model is unlikely to work, rather it could lead to loss of transplanted kidneys on a large scale due to inability of recipients to purchase immuno-suppressives. If this is not to happen, there is need for some form of subsidy from government for such patients for life.

When these questions are sorted out and a consensus is reached, there will be the need to have a **Regulatory body** whose duties are to review and update funding on a regular basis. Also, when FGN agrees to fund renal care all stakeholders (patients, Nephrologists, HMOs, FGN) involved in renal care need to ensure **sustainability of funding**. If experiences in the past are anything to go by, the history of free medical treatment has not been encouraging. Until the mid-eighties there was free treatment for tuberculosis and malignancies. These have gone into oblivion, to the best of my knowledge, in most states except for the few foreign-assisted schemes like the German Leprosy Relief Association assisted schemes. Although, it is desirable to separate renal care from politics there may be the need to have a **"Lobbying Committee"** of stakeholders who will help ensure that the flame for renal care funding is always alight. A legislative backing to renal care funding will be quite helpful.

## CONCLUSION and RECOMMENDATIONS

CRF/ESRD is prevalent in Nigeria. Its treatment is expensive and as at today majority of Nigerians, bear the cost of their renal care. In the face of high poverty rate and the resultant inability to maintain treatment options for more than a few months, countless lives have been lost. Many Nigerians in the productive age have died of kidney failure. To avert this trend the NAN needs to play a more visible role.

- To reduce the increasing burden of ESRD, emphasis needs now to be placed on preventive nephrology.
- For adequate planning funding and for full coverage, NAN needs to ensure the existence of a Renal Registry that will have information on the incidence and prevalence of kidney disease/failure in Nigeria.
- There is an urgent need for the FGN to step into funding of renal care to avert the unnecessary loss of lives of people who otherwise would have contributed to the social and economic growth of Nigeria. FGN intervention will reduce the frustration currently been faced by renal care providers.
- The NHIS as it is now cannot cater for patients needing renal care. HMOs will dictate where their clients receive renal care and this decision may be influenced by desire to make maximal profit. Eventually, acceptable and optimal renal care will be compromised and acceptable quality of patient care sacrificed. It may be necessary to push for a separate body outside the NHIS and HMOs that will handle renal care funding if acceptable and optimal renal care is not to be compromised.
- Until we are able to get government involved in renal funding, dialysis centres should be allowed by their different management bodies to buy consumables, drugs from source. This will go a long way to reducing cost of dialysis.
- Nigerian renal care funding can merge the benefits of the Medicare and the NHS models such that those in organized workforce can have their funding through NHIS while the young and the unemployed have government funding.

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