

UNIVERSITY OF LAGOS, NIGERIA

Inaugural Lecture Series 2016

TOPIC:

**THAT WE MAY OVERCOME CANCER:
"THE ODYSSEY OF A RADIATION
ONCOLOGIST"**

By

PROFESSOR FRANCIS ABAYOMI DUROSINMI-ETTI, OFR

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ONCOLOGIST"**

An Inaugural Lecture Delivered at the University of Lagos
Main Auditorium on Wednesday 8th of JUNE, 2016

BY

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University of Lagos Press and Bookshop Ltd

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Published 2016

By

University of Lagos Press and Bookshop Ltd
Unilag P.O. Box 132,
University of Lagos,
Akoka, Yaba-Lagos, Nigeria.

ISSN



DEDICATION

This Lecture is dedicated to the Memories of my Parents- Mr Henry Olaleye and Mrs Felicia Olubanwo Durosinmi-Etti; to my Late Maternal Brothers :Brigadier- General Emmanuel Foluso Sotomi and Engr. Anthony Olufimihan Durosinmi-Etti. Also to all those Nigerians who have succumbed to the scourge of CANCER within the last twenty years.

PROTOCOL

The Vice Chancellor

The Deputy Vice Chancellor; Academic and Research

The Deputy Vice Chancellor; Management Services

The Registrar

The Librarian

The Provost, College of Medicine

Chief Medical Director Lagos

University Teaching Hospital

Principal Officers of other Universities here present

The Dean, Faculty of Clinical Sciences

Other Deans here present

Heads of Departments

Distinguished Professors

Directors

My Lords-Spiritual and Temporal

Oloye Etti of Lagos and other White Cap Chiefs

Teaching and Non-Teaching Staff GreatAkokites.

Gentlemen of the Print and Electronic Media

Family Members

All my Invited guests

Distinguished ladies and gentlemen

INTRODUCTION

Mr Vice Chancellor Sir, it gives me immense pleasure to welcome you all to this Inaugural lecture at the University of Lagos; it is significant in a number of ways because the lecturer is the first Full Professor in Radiotherapy and Oncology ever appointed by the University of Lagos or indeed any other University in Nigeria. This lecture which ought to have been given by me as a new Professor almost 20 years ago is now being delivered today. I believe this is the time duly appointed by God and I am glad and grateful to God for this day. This lecture is also the 4th from the Radiation Biology, Radiotherapy, Radiology and Radiography Department – the RBRR and R department.

"It is better late than never" and this **"ACADEMIC DEBT"** is being repaid today along with the accumulated "interest" derived from the wider experience and maturity of the "debtor" following his long professional experience during this odyssey.

I am very delighted to welcome everyone present at this lecture which discusses a topic that should be of concern to all of us irrespective of our Age, Sex, Colour or Religion. It has no respect for our Status, Professional calling or Educational background. It is indeed a "leveller" if you are at risk as would be shown later.

Mr Vice Chancellor Sir, this Lecture focuses on the disease: **CANCER** otherwise called the big **"C"** – known to have caused many families countless nightmares and drained them of their financial and other resources.

I wish at this point to pay homage to all my teachers here present and those unavoidably absent. Special mention must be made of Prof JT Kofi Duncan; my professional father and mentor. You taught me how to crawl; stand; walk and run. More importantly, I know you are always very proud of me just as much as you know that I will love and

revere you forever. Thank you Sir for my sound professional upbringing

This Lecture titled THAT WE MAY OVERCOME CANCER is structured into the various sections as follows:

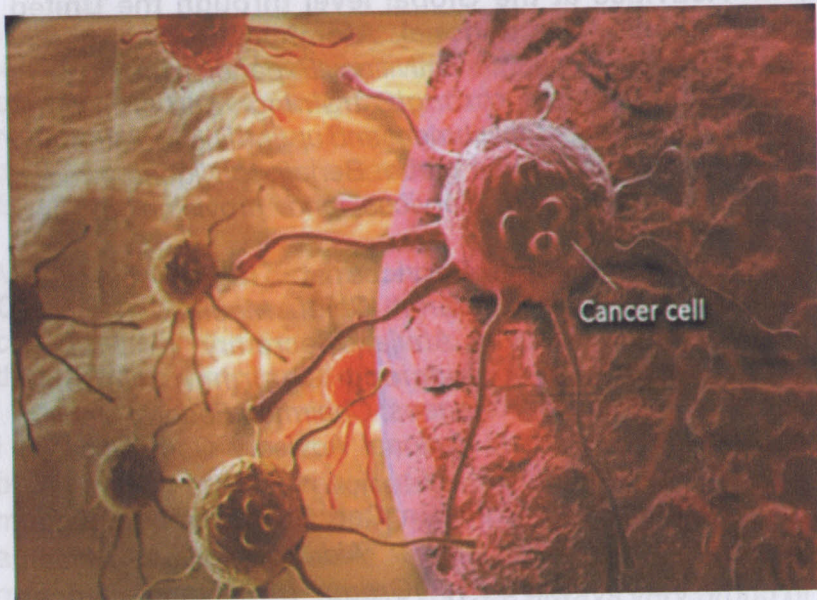
- 1) **Introduction:** *Definition of Cancer, Epidemiology, Causes and some Risk factors; Signs and Symptoms. Treatment modalities*
- 2) **History of Radiotherapy in Cancer management at LUTH** *including the early Pioneers; Infrastructure; Equipment; Other Specialists - Doctors, Medical Physicists; Radiobiologists; Oncology Nurses; Dosimetrists; Radiographers; Biomedical Engineers etc.*
- 3) **Start of my Professional Odyssey from LUTH to England and back.**
- 4) **Research activities aimed at finding solutions to some local Cancer management problems in Nigeria.**
- 5) **Activities at the Global level through the United Nation's International Atomic Energy Agency (IAEA)** *–Research activities; Expanding frontiers of Radiotherapy through training and research worldwide; Establishment and upgrading radiotherapy facilities across the globe. Benefit to Nigeria through Training, Expert Services and provision of new Equipment.*
- 6) **Other National Services at higher levels in Government:** *Pioneer Chief Medical Director, National Hospital Abuja; Secretary to Federal Character Commission; Chairman National Commission for Refugees; Chairman Federal Medical Centre; Chairman National Advisory Committee on Cancer Control;*
- 7) **My Advocacy Roles in Cancer Control;** *Nigerian Cancer Society; Cancer Aid Foundation; African Radiation Oncology Group (AFROG); Cancer*

Education and Advocacy Foundation of Nigeria; (CEAFON); etc.

- 8) **My contributions to development of Radiotherapy globally especially in Africa and Nigeria in particular.**
- 9) **Review of some more publications and contributions to knowledge.**
- 10) **Who is Prof FA Durosinmi-Etti, OFR?**
- 11) **Conclusions and Recommendations.**
- 12) **Acknowledgements.**
- 13) **References**

Definition:

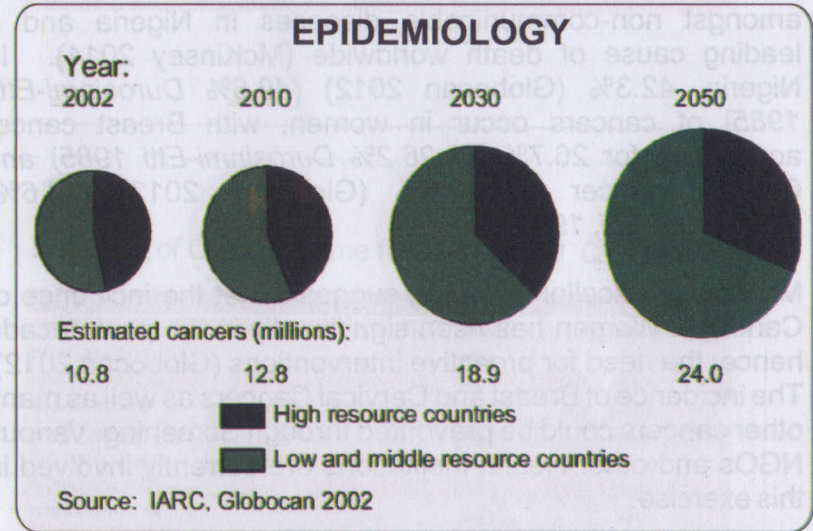
- Cancer refers to any one of a large number of diseases characterised by the development of abnormal cells that divide uncontrollably and have the ability to infiltrate and destroy normal body tissue.
- *Cancer often has the ability to spread throughout the body.*



HISTORY OF CANCER

- Mr Vice Chancellor Sir, it was first recognised by HIPPOCRATES (C460-370BC) and named by GALEN OF PERGAMON (AD 129-2161).
- Cancer has been observed before man evolved. Sarcomas have been seen in the bones of dinosaurs and those of our predecessor PITHECANTHROPUS-ERECTUS.
- It is represented by the crab because of its ability to move in any direction. It is an increasingly common problem. *By 2030's onwards, it is likely that 50% of the global population will develop CANCER at some point mainly due to an increasingly ageing population.*

EPIDEMIOLOGY



EPIDEMIOLOGY OF CANCER IN NIGERIA

Mr Vice Chancellor Sir, the incidence of cancer is on the rise globally, likewise is global cancer deaths which have been projected to increase from 7.4million in 2004 to 11.8million in 2030 with cancer accounting for the highest incidence in global deaths. At present, from a world population of 6 billion about 10million cases are diagnosed annually with 6 million deaths. More than half of all cancers (56.8%) and

cancer deaths (64.9%) in 2012 occurred in less developed regions of the world, like Nigeria and these proportions will continue to increase. Breast cancer is the commonest female cancer in Nigeria followed by Cancer of the Cervix with both responsible for almost 50% of all tumours seen in Nigeria while Cancer of the Prostate (10%) continues to be on the increase in men. (Durosinmi-Etti, 1985).

Mr Vice Chancellor Sir, 100,000 New Cancer cases per year were being diagnosed in Nigeria (Solanke TF 1999). This is projected to rise to 500,000 by 2015. (Durosinmi-Etti 1985) (Globocan on line access 2016).

Mr Vice Chancellor Sir, Cancer is the leading cause of death amongst non-communicable diseases in Nigeria and a leading cause of death worldwide (McKinsey 2014). In Nigeria, 42.3% (Globocan 2012) (49.8% Durosinmi-Etti, 1985) of cancers occur in women, with Breast cancer accounting for 26.7% (cf 26.2% Durosinmi-Etti 1985) and Cervical cancer for 13.8% (Globocan 2012) (23.6%) (Durosinmi-Etti, 1985).

Mr Vice Chancellor Sir, Data suggests that the incidence of Cancer in Women has risen significantly in the past decade hence, the need for proactive interventions (Globocan 2012). The incidence of Breast and Cervical Cancers as well as many other cancers could be prevented through Screening. Various NGOs and other Health Institutions are currently involved in this exercise.

Covering the cost of cancer care is mainly out of pocket for most patients in Nigeria and definite Government intervention and assistance are suggested such as coverage under the NHIS; Tax free incentives to pharmaceutical companies that bring in Cancer treatment drugs or outright offer of subsidy through tax on some known cancer causing consumable agents like cigarettes,

alcohol, fatty foods, foods with preservatives that are potentially carcinogenic etc.

OTHER ANTICANCER DRUGS

GROUP	NAME	COST
MONOCLONALANTIBO	BEVACIZUMAB (Avastin) 125mg/ml.	N116,000
Human epidermal growth factor receptor-2 (HER-2) +ve Breast Ca	TRASTUZUMAB (Herceptin) 150mg vial	N106,660
TAXANES	PACLITAXEL (Taxol) 6mg/ml.	N18,200 for 5ml
	DOCETAXEL (Taxotere) 10mg/ml	N42,380 for 2ml
	CABAZITAXEL (Jevtana) 40mg/ml (Sanoofi-Aventis)	N962,000 for 1.5ml
PLATINUM COMPOUNDS	CIS PLATIN 1mg/ml	N1560 for 10ml
	OXALIPLATIN (Eloxatin) 50mg vial	N39,000

EXAMPLE of Chemo regime for a Colorectal Ca. Patient

CHEMOTHERAPY AGENT	DOSE	COST
IV BEVACIZUMAB (AVASTIN)	500mg	N465,000
IV OXALIPLATIN (Eloxatin)	140mg	N107,000
IV GRANISETRON, Stat	6mg	N16,860
Tab DOMPERIDONE	20mg	N1,050
IV 5-FLUOROURACIL (bolus stat)	680mg	N4,000
IV 5-FLUOROURACIL (over 48 hrs)	4 Gm	N21,000
IV LEUCOVORIN for rescue	680mg	N1550
IV DEXAMETHASONE	8mg	N100
TOTAL PER COURSE		N616,000

There is a need to continue the development of more cancer management Infrastructure which are limited. Continuing education and training of Cancer Health care professionals must be given more priority to enable them acquire new and modern skills and knowledge. (CEAFON 2016 Cancer Summit Brochure)

%Tumour Types Treated by Radiotherapy at LUTH



Durosokele Etti, FA (1985): Cancer Patterns in Nigeria. *Nig Qry J of Hosp. Med* 12: 28-30

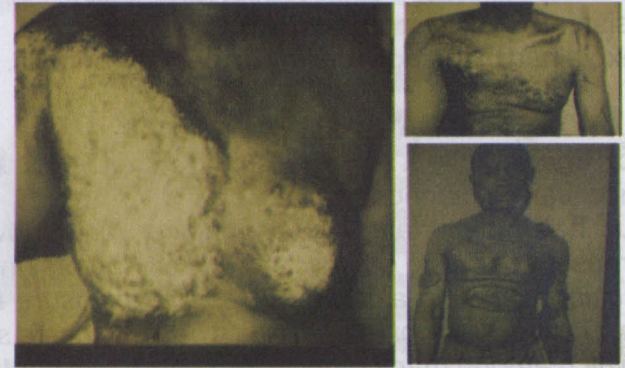
LOCAL NAMES FOR CANCER

- **YORUBA : ARUN ALAKASA; JEJERE**
- **IBO :AGBA NWERE ; OYA-TURU-AHU;**
- **HAUSA : CUTAR SANKARA ; CHIWO DAJI**

OVER 200 DIFFERENT TYPES

- | | | |
|---------------------|----------------------|---------------------|
| • Anal cancer | • Endometrial cancer | • Prostate cancer |
| • Bladder cancer | • Kidney cancer | • Stomach cancer |
| • Bone cancer | • Leukemia | • Skin Albinos |
| • Breast cancer | • Lung | • Testicular cancer |
| • Cervical cancer | • Liver cancer | • Thyroid cancer |
| • Colon cancer | • Lymphoma | • Vaginal cancer |
| • Colorectal cancer | • Ovarian cancer | • Uterus cancer |
| | • Pancreatic cancer | |

EXAMPLES OF LATE PRESENTATION BY CANCER PATIENTS SEEN AT THE RADIOTHERAPY SECTION. LUTH.



SIGNS AND SYMPTOMS – ARE USUALLY SITE SPECIFIC

- Fatigue
- Lump or area of thickening that can be felt under the skin
- Weight changes, including unintended loss or gain
- Skin changes, such as darkening of the skin, sores that won't heal, or changes to existing moles
- Changes in bowel or bladder habits
- Persistent cough or trouble breathing
- Difficulty swallowing

- Hoarseness
- Persistent indigestion or discomfort after eating
- Persistent, unexplained fevers or night sweats
- Unexplained bleeding from any of the body orifices.

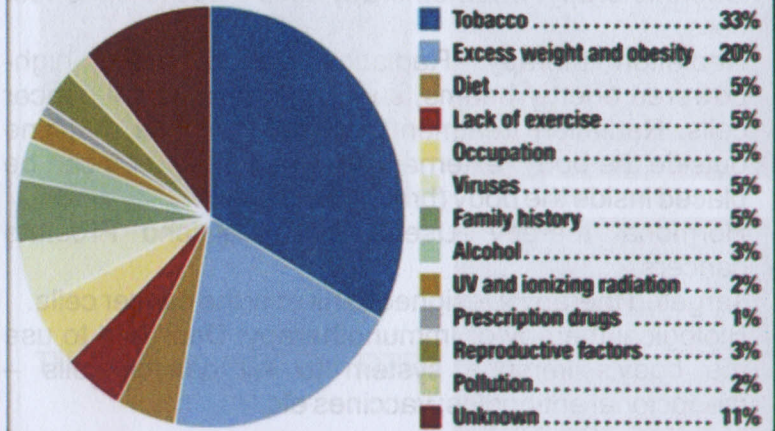
RISK FACTORS FOR CANCER

- **Your age:** While it's more common in older adults — cancer can be diagnosed at any age.
- **Your habits:** Certain lifestyle choices are known to increase your risk of cancer. Such factors include *Smoking, Drinking alcohol. Excessive exposure to the sun. Obesity, Lack of exercise and having unsafe sex all of which among many others risk factors can contribute to cancer.*
- You can change these bad habits through your determination to lower your risk of cancer.

Some other risk factors include:

- **Your family history:** It is possible that mutations are being passed from one generation to the next. However, having an inherited genetic mutation does not necessarily mean you'll get cancer.
- **Your environment:** The environment around you may contain harmful chemicals that can increase your risk of cancer. Even if you don't smoke, you might *inhale second-hand smoke* if you go where people are smoking or if you live with someone who smokes.
- **Chemicals** in your home or workplace, such as asbestos and benzene, also are associated with an increased risk of cancer. (Ref: Medscape: On line)

Estimated Percentage of Cancer Cases Caused by Identifiable and/or Potentially Preventable Factors



American Association for Cancer Research (AACR) Cancer Progress Report 2012

GOALS OF CANCER TREATMENT

- **Cure:** The goal of treatment is to achieve a cure allowing a normal life span.
- **Primary treatment:** The goal of a primary treatment is to completely remove the cancer from the body (*Surgery*) or kill the cancer cells. (*Radiation, Chemo etc.*)
- **Adjuvant treatment:** The goal of adjuvant therapy is to kill any cancer cells that may remain after primary treatment in order to reduce the chance that the cancer will recur.
- Any cancer treatment can be used as an adjuvant therapy. Common adjuvant therapies include chemotherapy, radiation therapy and hormone therapy.

Palliative treatment: Palliative treatments may help relieve side effects of treatment or signs and symptoms caused by cancer.

AVAILABLE TREATMENTS FOR CANCER

- **Surgery:** To remove the cancer or as much of the cancer as possible.
- **Chemotherapy:** Chemotherapy uses drugs to kill cancer cells.
- **Radiation therapy:** Radiation therapy uses high-powered energy beams, such as X-rays, to kill cancer cells. Radiation treatment can come from a machine outside the body (external beam radiation), or it can be placed inside the body (brachytherapy).
- **Hormonal therapy:** Useful in Breast and Prostate cancers.
- **Targeted therapy:** Designed to hit only the cancer cells.
- **Biological therapy or Immunotherapy:** Designed to use the body's immune system to kill cancer cells – monoclonal antibodies; vaccines etc.

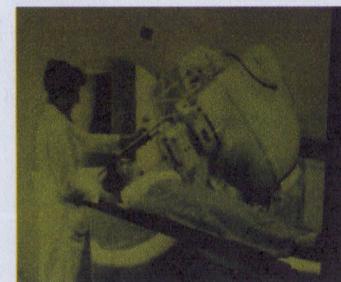
BASIC LIST OF TELETHERAPY AND DOSIMETRY EQUIPMENT AVAILABLE AT THE LAGOS UNIVERSITY TEACHING HOSPITAL

1. Linear Accelerator (Elekta) with 2 Photon Energies (6 & 15 MV) and 6 Electron Energies (4,6,8,10,12 & 15 MeV)
2. Computerized Treatment Planning System (Elekta Precise Plan)
3. CT SIMULATOR (G.E.)
4. Complete Mould Room Facility with accessories and automatic and manual block cutters
5. Complete Dosimetry equipment including computerized 3-D water scanning phantom, PTW Unidos Electrometer and Chambers, LINACHECK and Sr – 90 Check Source for both thimble and flat Chambers, polystyrene phantoms.
6. Survey meters
7. Portal imaging stand
8. Diagnostic imaging facilities

Courtesy: FMoH Medical Physics Steering Committee



LINEAR ACCELERATOR



COBALT - 60 UNIT

TELETHERAPY MACHINE TYPES



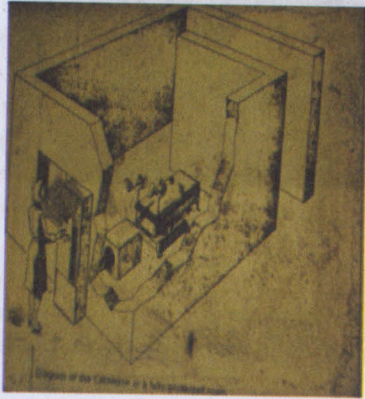
SIMULATOR

ROLE OF RADIOTHERAPY IN CANCER TREATMENT

- A major modality for treatment of CANCER required by at least 50% of all types of cancer
- Also useful for some non-cancerous diseases e.g. Keloid scars, Mycosis Fungoides etc.
- Treatment aimed at CURE or Palliation.
- Early cases are potentially curable
- Late cases get palliation e.g. haemostasis; relieve obstruction (SVCO), bone pain from metastasis; Spinal cord compression, etc.
- Useful alone or combined with surgery, chemotherapy etc.
- Usually a non-invasive procedure.

FORMS OF RADIOTHERAPY

- **TELETHERAPY (Long distance)** **BRACHYTHERAPY (Short distance)**



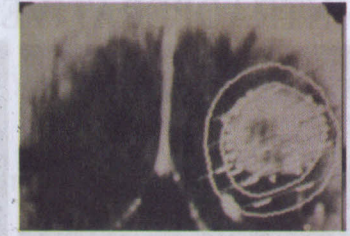
TYPES OF BRACHYTHERAPY

- **Surface Moulds** – nose, hands, face etc
- **Interstitial**- Breast, tongue, Brain etc
- **Intracavitary**- Cervix, Bladder.
- **Intraluminal**- Oesophagus, Bronchus
- **Intraoperative** – Stomach, Abdomen etc

SURFACE MOULDS



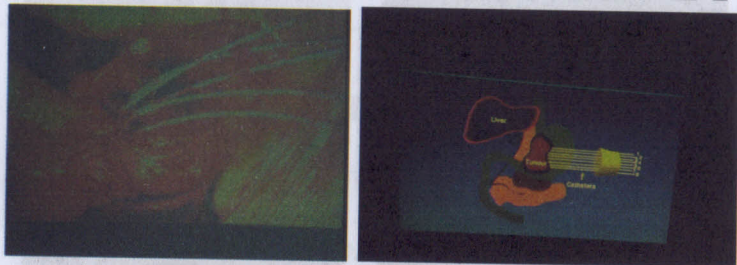
INTERSTITIAL BRACHYTHERAPY



INTRALUMINAL BRACHYTHERAPY



INTRAOPERATIVE BRACHYTHERAPY

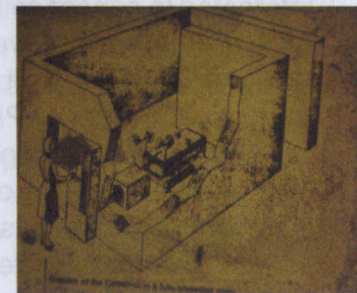


INTRACAVITARY BRACHYTHERAPY



MANUAL - LOW DOSE RATE

REMOTE AFTER LOADING



THE START OF MY ODYSSEY

Mr Vice Chancellor Sir, I had my medical training at the College of Medicine, University of Lagos between September 1967 and June 1972 when I graduated. During my Clinical years, I observed that virtually all the patients I saw with Cancer had advanced disease and many of them died in rather painful and undignified ways.

My young mind registered this and I knew since 1971 that "Overcoming Cancer" would be my dream.

On completion of my Housemanship in June 1973, I was accepted in July 1973 as a Senior House Officer at the Radiotherapy Unit of the then Department of Radiation Biology and Radiotherapy.

The Compulsory NYSC had not started at that time and my colleagues and I missed all the fun and excitement associated with NYSC which started with the 1973 set.

I started work on 1 July 1973 as Senior House Officer in Radiotherapy at the Department of Radiation Biology and Radiotherapy.

There were three Units:

1. **Radiation Biology Unit** based at the College of Medicine under the late Prof Kurt Solomon PhD. He was interested in cancer cell cultures and the radiation effect on them. He was the overall Head of Department.
2. **Medical Physics Unit:** headed by Dr, later Professor Augustine Fregene PhD who later succeeded Prof Solomon as the Head of Department. Prof Fregene was interested in aspects of Nuclear Medicine using radio isotopes based scans using a Rectilinear Scanner. Indeed the first Nuclear Medicine centre in Nigeria started at the College of Medicine, University of Lagos. The original basic Infrastructures- laboratories etc. are still in place and I suggest that the University through the College of Medicine should consider resuscitating the service thus regaining our original status as the pioneers in Nuclear Medicine field in Nigeria. This is possible, feasible and sustainable based on the current increasing clinical needs. I know there are International funding and technical cooperation support available for such projects.
3. **Radiotherapy Unit:** This closely knit Unit was under Dr and now Professor JT Kofi Duncan- *the Pioneer and Grandfather of Radiation Oncology in Nigeria and West Africa*. The Unit consisted between 1973 and 1976 of very dedicated staff including the following:
Dr and later Asst. Prof DOS Ajayi who joined the Department in 1974 on his return from Postgraduate studies in the UK
 - Dr Mrs Tsereje Oteri whom I met in the Unit/ Department as a Senior House Officer.
 - **Dr now Professor FA Durosinmi-Etti who joined in July 1973 as Senior House Officer.**
 - Dr - now Professor K. K Ketiku who was working at St Nicholas Hospital and was invited by me.

- He joined the Department in 1975 also as a Senior House Officer.
- Dr - now Professor OB Campbell joined the Department in 1976 on the invitation of Dr Ketiku.
- Mr, -now Dr Ogunleye – a Medical Physicist now based in USA.
- Matron Ibronke Sappah – a Royal Marsden Hospital, London trained Oncology Nurse.
- Mrs Ekanem also a UK trained Therapy Radiographer
- Mr Francis Idehen, also a UK trained Therapy Radiographer.
- Mrs Moji Animashaun (nee Thomas) – UK trained.

It is noteworthy that most of us listed above actually occupied a very small building as shown below which today ought to be preserved and recorded as being **the FIRST Radiotherapy centre in Nigeria**.

The Building is sandwiched between the Mortuary and the LUTH Petrol Station.

Incidentally, I have noticed that many Radiotherapy Centres elsewhere are usually located close to the Morgue!!! Perhaps to remind us of the Myth that Cancer is synonymous with DEATH

Mr Vice Chancellor Sir, I am pleased to announce that – Things are changing for the better and Cancer no longer needed to be seen as a death sentence especially when diagnosed and treated early.



Some of the items of Equipment in those early days were:

- RT 50 - A 50KV SUPERFICIAL X RAY MACHINE FOR KELOIDS
- ISOMATIX 250 - 250KV ORTHO VOLTAGE MACHINE
- RT 305 - A 300KV ORTHOVLTAGE MACHINE FOR DEEPER TUMOURS.
- CAESIUM-137 MANUAL AFTER LOADING BRACHYTHERAPYSOURCES AND HENSCHKES APPLICATORS.
- 2 CURIETRON REMOTE AFTER LOADING BRACHYTHERAPY MACHINES DONATED IN 1992 BY IAEA THROUGH MY EFFORTS.

The Radiotherapy Unit under Prof. Duncan moved in to our current larger premises in 1975 following the installation of a more sophisticated Theratron-780C, Cobalt-60 Teletherapy machine donated in 1973 by the Canadian Government. We also had Dosimetry and other items of equipment which guaranteed radiation safety and improved treatment of our cancer patients. The IAEA through my efforts also donated a new AGAT-R1 Cobalt-60 Machine to the Unit in 1990.

The Department continued to grow with the addition of more staff including the following who joined at various times:

1. Dr, now Professor AT Ajekigbe, current Head of the Department.
2. Dr now Professor Moses A. Aweda, a French trained Medical Physicist
3. Dr now Associate Professor AT Olasinde – currently Head of Radiotherapy Department at ABUTH Zaria
4. Dr Festus Igbinoba – now Head of Radiotherapy Department at National Hospital, Abuja
5. Nursing Sister Aiyela who retired as a Matron many years later.
6. Nursing Sister Tina Olumese (later Matron) – She sponsored her Oncology Nursing Training programme herself at the Royal Marsden Hospital, London.
7. Nursing Sister Taiye Ijandipe (now Mrs Salawu) – who as will be mentioned later was among many others whose training at the Royal Marsden, London was facilitated by me during my tenure at the IAEA. Vienna.
8. Sister Moji Okanlawon of Blessed memory- was sent for training at Sheffield
9. Sister Owolabi who was sent to Sweden for her Oncology Nursing Training
10. Mr Oladeji a very experienced Physicist was also assisted to do a Masters programme at Hammersmith Hospital London. He recently retired from service at LUTH.
11. Mr Olusoji Ojebode, a British trained Therapy Radiographer also joined the Department. I later helped to facilitate his additional specialised training in Quality Control at Vienna, Mould Room Techniques and Maintenance of the Cobalt machine at Russia; He currently works at the National Hospital, Abuja.
12. Mr Femi Olaniwun is another British trained Therapy Radiographer currently working at the National Hospital.
13. Mr Nerius Okoye – Joined the Radiotherapy Unit and he also benefitted from training as a Therapy

Radiographer at the Royal Marsden Hospital in London.

- 14. Mr Julius Odu like the above also had his training as a therapy radiographer at the Royal Marsden Hospital in London.

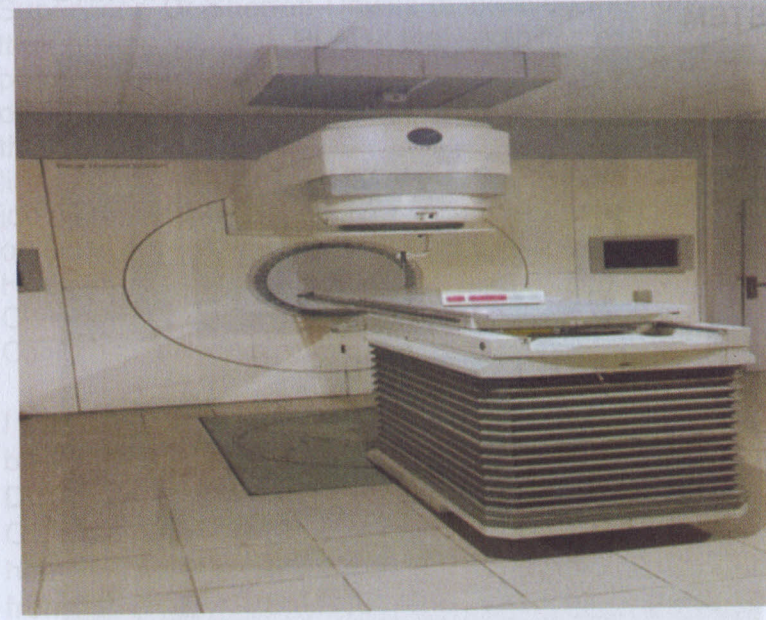
THE RADIOTHERAPY DEPARTMENT TODAY

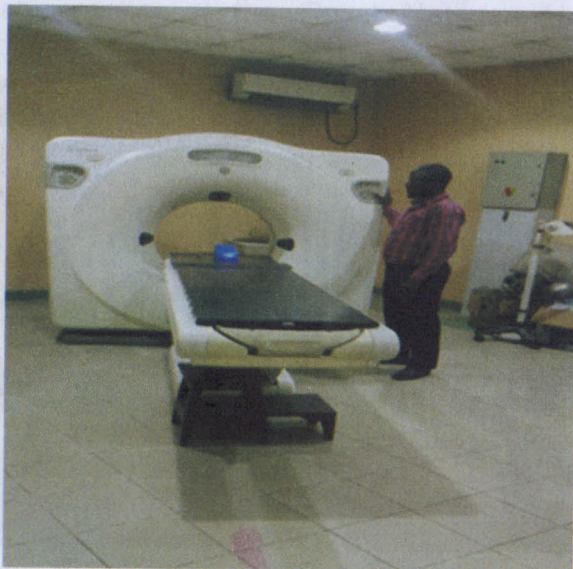
The Department is known today as the 4Rs: Department of Radiation Biology, Radiotherapy, Radiodiagnosis and Radiology following a merger of all Departments that have Radioxxxx in their names even though their operational areas and functions are dissimilar in many aspects. Apart from the administrative convenience from the forced marriage the merger indeed deserves to be reviewed and I hope that the University management is looking into this.

However the Radiotherapy and Oncology section continues to make modest progress. We now have many young doctors who are Residents, many young Consultants and Lecturers gradually making their ways up the Professional ladder as Clinical Oncologists. Medical Physicists, Oncology Nurses, Dosimetrists, Therapy Radiographers. Other members of the Clinical Oncology team are also in the Department contributing their quota to the cause of overcoming Cancer. Although, we lack the necessary functional equipment for overcoming Cancer, I am aware that the Government of the day through the Honourable Minister of Health has declared that overcoming Cancer is a priority in this administration.

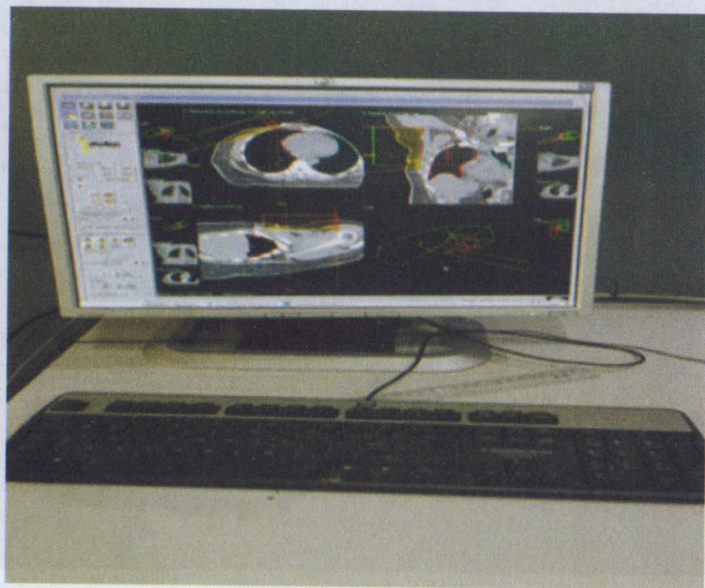


THE NEW LINEAR ACCELERATOR





MODERN COMPUTERISED TREATMENT PLANNING SYSTEM



MY TRAINING IN RADIATION ONCOLOGY AND NUCLEAR MEDICINE AT THE CHRISTIE HOSPITAL, UNIVERSITY OF MANCHESTER, ENGLAND

Mr Vice Chancellor Sir, through the Grace of God and the help of Prof Duncan, my Professional Father and Mentor, I secured a training position at the Christies Hospital and Holt Radium Institute, University of Manchester, England. This is one of the oldest and world renowned Cancer Institutes in the world. Most other Cancer centres all over the world would often refer to 'Manchester techniques' which they adapt for use in their various hospitals.

I was granted a 3years Study leave with pay by LUTH and left for Manchester, England together with my wife and two children on 22nd September 1975. Economy Air passage for us was paid for by LUTH and I was also entitled to daily travel allowance and other allowances as were in practice in those days. I was a very comfortable student just ready to face my studies and return home as early as possible. As it were, my Supervisor, Dr Sherrah-Davies of Blessed memory insisted that having passed PLAB- the eligibility examination for practice in the UK by overseas trained doctors- I must be offered a paid job to enable me benefit from full training like their home students and be held accountable for my actions like any of their nationals. After much persuasion I accepted a job as a Senior House Officer rising over the years to the level of Registrar and Senior Registrar at Cookridge Regional Hospital, Leeds and Merseyside Regional Hospital, Clatterbridge, Liverpool, England where I worked to gain more Clinical experience before returning to Nigeria in 1980.

I was tempted to stay back in England but for the fact that I just believed that Nigeria needed people like me to join Professor Duncan and our other colleagues to clinically fight and Overcome Cancer in Nigeria. The decision to pack and return home was made easier for me when I received a phone call from Prof E.A. Elebute who as CMD and Provost

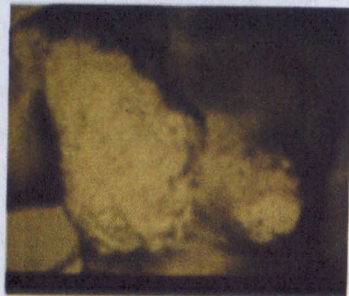
asked when I would be back home having completed my training. He assured me that I would get my appointment as Lecturer and Consultant as soon as possible following my return. I was then not sure whether or not he knew I was considering staying back in England with offers for Consultant post in England. His phone call and my loyalty to my country in addition to the contract I signed all helped me make up my mind and was back home to LUTH in late 1980. I was soon appointed Consultant and Lecturer 1 early 1981.

RESEARCH AND SOME PUBLICATIONS ON BASIC CANCER PROBLEMS IN NIGERIA

I remember one day soon after my return from Manchester, one of my revered teachers and a great mentor, Prof Deji Femi-Pearse said to me "Youngman, you are sitting on Gold with your area of specialisation as an Oncologist. I hope you will make the best of it" He said there are opportunities for me to define the actual status, demography and other issues as regards Cancer in Nigeria for which information were still lacking.

MAGGOT INFECTED FOUL SMELLING TUMOUR

- The publication, VO Rotimi and Durosinmi-Etti (1983): Flayl in the treatment of neoplastic ulcers (1) was an attempt to find a local solution to a common problem with the malodor emanating from many of our patients with infected malignant ulcers. The effectiveness of this local topical application is still commonly used among our patients and other parts of the world.
- The significance of isolating the various organisms in infected malignant ulcers and measures to manage them were also reported in other publications (2,3).



92% of Cancer patients in Nigeria often present with late and advanced stages 3 and 4 diseases. The reasons for this avoidable delays were analysed and solutions proffered in my publication titled Cancer patients in Nigeria- Causes of delay before diagnosis and treatment.(4)

Another joint publication- Nnatu SNN and Durosinmi-Etti (1985): The problems with the management of carcinoma of the cervix in Nigeria (5) looked into the basic issues affecting the inefficient management of this lesion in Nigeria and proffered solutions.

Durosinmi-Etti FA and Ajekigbe R (1984) also looked into the reasons for the apparent rising incidence of Cancer of the Cervix in the younger generation of Nigerians (6).

Durosinmi-Etti,FA and Ketiku, K K (1984) examined the beneficial role of radiotherapy over surgery in the management of Chemodectomas in Nigeria. It is now the preferred choice of treatment for this condition, (7).

Kaposi Sarcoma is a malignant lesion which hitherto has been treated with radiotherapy in many cases. The joint study by Ketiku KK and Durosinmi-Etti, FA (1984): The treatment of Kaposi Sarcoma by combination chemotherapy in Nigeria demonstrated the superiority of this approach over radiotherapy in the management of this condition (8).

GLOBAL ACTIVITIES AT THE UNITED NATION'S INTERNATIONAL ATOMIC ENERGY AGENCY

Mr Vice Chancellor Sir, between 1984 and 1988 while serving as Head of the Radiotherapy Unit of LUTH and Ag Head of Department, I had various opportunities to attend and present papers at many International Conferences. After my presentation at one of such meetings in Japan in 1987, a senior official from the International Atomic Energy Agency, (IAEA) Vienna approached me and told me the IAEA would be very happy to appoint me as a Staff Member

and the Radiotherapy Specialist in charge of all the Agency's activities in Radiotherapy all over the world. He stated that the IAEA would request my formal nomination by the Federal Government of Nigeria.

My duties included initiation and conduct of multi institutional and international coordinated research projects in the management of Cancer particularly using Radiotherapy; Establishment of new Radiotherapy services including Equipment, Manpower; and Experts especially in the developing countries in Africa, Asia and Pacific region, Latin America, Eastern Europe and other parts of the world. Organisation of various training courses, Conferences and Symposia in Radiotherapy all over the world. Training of Radiation Oncologists, Medical Physicists and Oncology Nurses at various institutions.

SOME SUPPORT FOR NIGERIA

TRAINING	LUTH	UCH	NHA	ABUTH
Radiation Oncologists	2	1	1	1
Medical Physicists	1	2	1	1
Radiographers	3	2	2	
Oncology Nurses	4		1	2
Cobalt Machine	1	1		1
LDR BRT machine	2		2	1
Mould Room /Dosimetry facilities	Yes	Yes	Yes	

SOME ACADEMIC INTERNATIONAL RADIOTHERAPY RELATED ACTIVITIES

Mr Vice Chancellor Sir, I was the Coordinator of International research project on computer assisted planning and dosimetry in radiotherapy of carcinoma of the cervix in Asia and Pacific regions. Participating institutions from: India, Indonesia, Japan, Korea, Philippines, Pakistan, Malaysia, Sri-Lanka and Thailand. 1989-93

Coordinator of global research project on radiotherapy of head and neck cancer. Participants from: England, Cuba, Bulgaria, Austria, Cameroon, Nigeria, Pakistan and Turkey. 1990-93

Coordinator of research project on "Advanced brachytherapy techniques" for malignant tumours at various anatomical sites. 1993-1994

Coordinator of research project on Use of radiotherapy in advanced cancer, April 1995 - January 1996.

Examiner in Radiotherapy and Oncology for the Postgraduate Medical College of Nigeria and West African College of Surgeons, 1994 till date.

IAEA Expert/Lecturer at the Postgraduate Radiotherapy Training Programme at the University of Zimbabwe, Harare, Zimbabwe January -March 1995.

Organisation and conduct of a Regional Training course for senior Radiotherapists and Medical Physicists from Africa, September 25 - October 6, 1995, Lagos, Nigeria.

IAEA Expert/Lecturer in Radiotherapy at the Makerere University, Mulago Hospital, Uganda, April - May 1996.

SCIENTIFIC SECRETARY FOR THE FOLLOWING INTERNATIONAL CANCER CONFERENCES

IAEA/WHO First research coordination meeting on computer assisted planning and dosimetry in carcinoma of the cervix. Bangkok Thailand, October 30-November 2, 1990.

IAEA/WHO First research coordination meeting on computer assisted planning and dosimetry in radiotherapy of Head and Neck tumours. Manchester, England. June 1-5. 1991

Regional training course for Medical physicists on recent advances in Radiotherapy. Lahore, Pakistan. 16-27 October 1989.

IAEA/WHO seminar for Africa on "Organisation and training in radiotherapy". Cairo, Egypt. 1-5 December 1989

Workshop for Physicists and radiation technologists on "Introduction of computers and database in radiotherapy of carcinoma of the cervix". Bombay, India. 1-5 June 1992.

Second research coordination meeting on "Computer assisted planning and dosimetry in radiotherapy of carcinoma of the cervix" Jakarta, Indonesia. November 30 - December 2 1992.

International Consultants meeting to design a new global coordinated research project on "Advanced brachytherapy techniques." Vienna, Austria December 7-9 1992.

Final research coordination meeting on computer assisted planning and dosimetry in head and neck cancers. Vienna, Austria September 20-22. 1993

Final research coordination meeting on Computer assisted planning and dosimetry in radiotherapy of carcinoma of the cervix in Asia and Pacific region. Seoul Korea, March 28-30 1994.

Regional Training Course on modern techniques and QA in radiotherapy, Sept 25-Oct 6, 1995, Lagos, Nigeria.

MY INVOLVEMENT IN RADIOTHERAPY AND ONCOLOGY SERVICES IN THE FOLLOWING COUNTRIES

BOLIVIA: Establishment of brachytherapy facilities at Teaching Hospitals at La Paz, Cochabamba, Santa Cruz and Sucre. 1992.

CAMEROON: Establishment of low dose rate brachytherapy services at the General hospital at Yaounde and Douala. 1992-93.

DEM. REP. OF KOREA: Improvement of radiotherapy services for Teletherapy and brachytherapy at Pyongyang. North Korea. 1992

ECUADOR: Establishment of remote after loading high dose rate brachytherapy facilities at Quito. 1992.

EGYPT: Pilot project on Brachytherapy for carcinoma of the cervix. Included coordination of the training programme for 120 specialists. 1988-92

Coordination of a new project aimed at the manufacture of a simple Cobalt-60 teletherapy machine in Cairo, 1993.

ETHIOPIA: Establishment of a new department of radiotherapy at the University of Addis Ababa. 1992.

GUATEMALA: Establishment of high dose rate remote afterloading brachytherapy facilities 1992.

GHANA: Establishment of the National Radiotherapy and Nuclear Medicine Network at Korle-Bu Teaching Hospital. Accra 1997-1998.

HAITI: Improvement of radiation protection and radiotherapy services 1992.

INDONESIA: Establishment of new Teletherapy facility at Persahabatan hospital. Jakarta, 1991 Development of postgraduate training programme in Medical Physics, 1993.

JORDAN: Upgrading of radiotherapy and medical physics at Al-Bashir Hospital. Amman. Jordan. 1991

KENYA: Introduction of high dose rate remote after loading technique for treatment of carcinoma of the cervix and oesophagus at the Kenyatta National Hospital.

NICARAGUA: Establishment of a modern radiotherapy centre. Managua. 1990

NIGERIA: Resuscitation of radiotherapy facilities (Brachytherapy and Teletherapy) at the Lagos University Teaching Hospital. 1992.

Establishment of Brachytherapy service at the new radiotherapy department of Ahmadu Bello University Teaching hospital, Zaria. 1993.

Establishment of a new Radiotherapy Service with a Linear Accelerator in Nigeria at the National Hospital for Women and Children. Abuja 1997

PAKISTAN: Establishment of new Cobalt-60 teletherapy unit at Jamshoro Medical centre 1990.

SRI-LANKA: Introduction of remote high dose rate brachytherapy and computerised planning. Cancer Institute. Colombo, 1989.

UGANDA: Development of a new radiotherapy department at Mulago hospital. Kampala 1993.

VENEZUELA: Introduction of high dose rate remote after loading brachytherapy techniques at the Central University, Caracas 1989.

ZIMBABWE: Establishment of a postgraduate training programme in radiotherapy and medical physics. 1988.

ROMANIA: Introduction of remote after loading brachytherapy techniques at Coltea Hospital. Bucharest 1993.

URUGUAY: Introduction of remote after loading brachytherapy techniques and computerised treatment planning. 1993.

VIETNAM: Upgrading of radiotherapy facilities for Teletherapy and Brachytherapy at the Tumour Centre. Ho Chi Minh City 1993.

COLOMBIA: Introduction of remote after loading brachytherapy techniques at the National Cancer Institute. Bogota 1993.

TANZANIA: Improvement of Radiotherapy services and Dosimetry at Muhimbili Medical Centre. Dar essalam. 1993

SOME PUBLICATIONS FROM MY GLOBAL ACTIVITIES

- F.A. Durosinmi-Etti (1990): An overview of cancer management by radiotherapy in Anglophone West Africa. *Int. J. Radiation Biol. Phys.*, Vol 19, 1263-1266.
- FA DUROSINMI-ETTI (1989): IAEA-TECDOC-493: Improvement of cancer therapy by conventional radiation and chemical or physical means. Report of a coordinated research programme. 170 pages. Edited by F.A. Durosinmi-Etti.
- M. Nofal, F.A. Durosinmi-Etti, G.P. Hanson, J. Stjernsward (1990): Supporting cancer care in the developing countries. *Int. J. Radiation Biol. Phys.*, Vol. 19, 1249-1256.
- Yomi J, Ngniah A, Durosinmi-Etti, F.A. Kingue S; Muna WF (1995): Computer assisted planning and dosimetry for radiation therapy of Head and Neck cancers in Cameroon. *La Semaine des hopitaux de Paris*; vol 71; no 15-16; 450-455

SOME PUBLICATIONS FROM MY GLOBAL ACTIVITIES

- G.P. Hanson, J. Stjernsward, M. Nofal, F. Durosinmi-Etti (1990): An overview of the situation in radiotherapy with emphasis on the developing countries. *Int. J. Radiation Biol. Phys.*, Vol 19, 1257-1261.
- F.A. Durosinmi-Etti (1991): Special requirements in the training of radiation oncologists for Africa. *IAEA-TECDOC 614*. 205-210.
- IAEA-TECDOC 614 (1991): Organization and training in radiotherapy for developing countries in Africa. Proc. joint IAEA/WHO Seminar held at Cairo Egypt 11-15 December 1989. 225 pages. Edited by F.A. Durosinmi-Etti.
- Durosinmi-Etti F.A. and Mouelle-Sone A. (1993). A regional training programme for radiotherapists and allied professionals for the West African Health Community. *Radiotherapy and Oncology*. 26. 260-263.
- Manual on radiation protection in hospitals and in general practice. Contributing editor to " Vol.5 on Radiotherapy." Sponsored by IAEA/WHO/ILO/CEC/PAHO. October 1992.

OTHER SERVICES TO THE COMMUNITY

- MEMBER NIGERIA FOOTBALL ASSOCIATION AND THE OFFICIAL MEDICAL OFFICER TO THE NATIONAL FOOTBALL TEAM –THE GREEN EAGLES BETWEEN 1973 AND 1974.
- INTRODUCED COMPUTER CLASSES AND TAUGHT MANY OF THE PROFESSORS AND LECTURERS AT CMUL TO THE BASIC USE OF COMPUTERS AND SOFTWARE PACKAGES :DATA BASE (Lotus 123); WORD PROCESSING AND GRAPHICAL SOFTWARES (Corel Draw); FAXES etc AROUND 1990.
- CHAIRMAN OF A FEW HIGH POWERED INVESTIGATIVE UNIVERSITY PANELS
- CURRENT CHAIRMAN UNIVERSITY EXAMINATION BOARD.
- MEMBER ACADEMIC PLANNING COMMITTEE OF THE UNIVERSITY. etc

MY ROLE IN CANCER ADVOCACY

A sure route to Overcoming Cancer is through Prevention. However, there is the need to reach the people by getting involved in Cancer Advocacy. In this regard I have made the following contributions among others:

- Founded the Cancer **Aid Foundation**, in 1981 and is the first Registered Cancer Charity in Nigeria by the Corporate Affairs Commission. The older Nigerian Cancer Society of which I was a past National Treasurer and currently Member of the Board of Trustees was founded in 1968 but only got officially registered recently. The Cancer Aid Foundation continues to promote cancer awareness, diagnosis, treatment and cancer survivorship.
- Originated and was Pioneer Secretary-General of the **African Radiation Oncology (AFROG)** which is still being supported by the IAEA and WHO.
- Pioneer President of Cancer Education and Advocacy Foundation of Nigeria (**CEAFON**) which hosted a highly successful cancer summit in October 2015 supported by various Cancer Stakeholders such as the Federal Ministry of Health, Pharmaceutical Companies: Roche, Astra Zeneca etc. It has also just produced about three weeks ago, the National Guidelines for Multidisciplinary Management of Breast

Cancer in Nigeria which will help Assure the Quality of Breast Cancer treatment in Nigeria.

As Chairman National Consultative Committee on Cancer Control, we developed the first ever **National Cancer Control Plan for Nigeria** which covered prevention, early detection and management of cancer including Terminal care for Cancer patients in Nigeria.

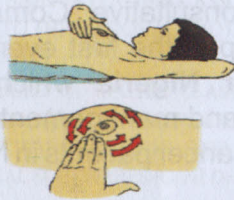
PREVENTION THROUGH SCREENING

- Some cancer prevention is based on systematic screening in order **to detect small irregularities or tumors as early as possible** even if there are no clear symptoms present.
- Breast self-examination, mammograms, testicular self-examination, VIA/Pap smears, PSA are common screening methods for various cancers.

Some types of screening

- FOR CERVICAL CANCERS
- PAP SMEARS - ONCE A YEAR FOR ADULT WOMEN.
- VIA- (VISUAL INSPECTION WITH ACETIC ACID) - TO DETECT AND TREAT EARLY CERVICAL CANCER IN WOMEN.
- VACCINATION AGAINST HPV (Human Pappiloma Virus)
- FOR BREAST CANCER SCREENING.
- ENCOURAGE MONTHLY SBE (Self Breast Examination) Techniques.
- MAMMOGRAMS - Soft Xray of the Breast using some special techniques)
- ULTRASOUND EXAMINATION OF THE BREASTS etc, etc.

Breast Self-Examination



Step 1

Lie down and put your left arm under your head. Use your right hand to examine your left breast. With your 3 middle fingers flat, move in a circular motion over the breast, checking for any lump, hard knot, or thickening. Use different levels of pressure to feel breast tissue at different levels in your breast. Next, put your right arm under your head and examine your right breast with your left hand in the same way. Be sure to check the whole breast, from your collar bone above your breast and down until you feel only ribs below your breast.



Step 2

Look at your breasts while standing in front of a mirror with your hands on your hips. Look for lumps, new differences in size and shape, and swelling or dimpling of the skin.



Step 3

Raise one arm, then the other, so you can check under your arms for lumps.



Step 4

Squeeze the nipple of each breast gently between your thumb and index finger. Report any discharge or fluid to your health care provider right away.

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Basic instruments required for via or vili



Inspect vulva and vagina



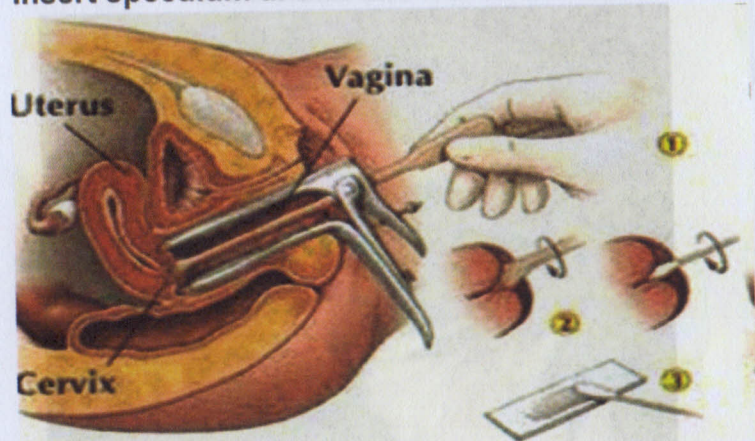
Medscape

Source: AIDS © 2009 Lippincott Williams & Wilkins

CERVICAL CANCER SCREENING

- Visual inspection of the cervix, using acetic acid or Lugol's iodine to highlight precancerous lesions so they can be viewed with the "naked eye", shifts the identification of precancer from the laboratory to the clinic. Such provide women with immediate test results.
- A range of medical professionals – doctors, nurses, or professional midwives – can effectively perform the procedure, provided they receive adequate training and supervision.

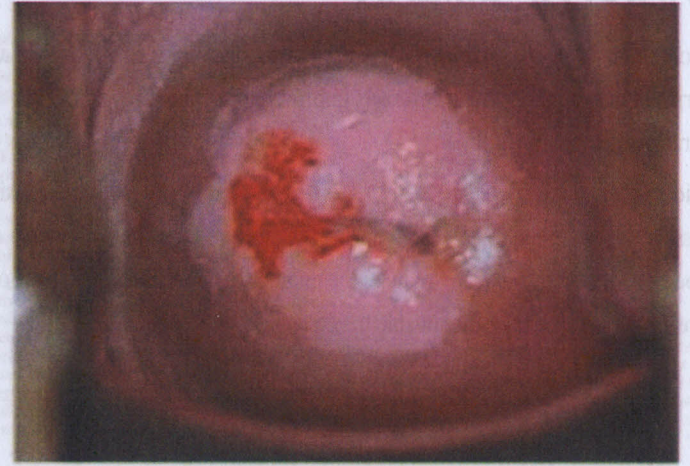
Insert speculum and cotton soaked in acetic acid.



Wait to see the effect



Acetowhite lesion.



Positive diagnosis for cancerous cell activity

Key messages

- The screening procedure is relatively simple, quick, and is not painful as earlier shown.
- The small number of women who need treatment after screening can receive a simple procedure to remove the lesion.
- A screening test that is positive is not a death sentence!
- It provides the opportunity to eliminate abnormal cells before they become cancerous.

VIA vs PAP SMEAR

- VIA can offer **significant advantages over Pap** in low-resource settings, particularly in terms of increased screening coverage, improved follow up care and overall program quality.
- Providers **can share the results of VIA with patients immediately**, making it possible **to screen and treat** women during the same visit such that follow up care can be provided on the spot and reduces the number of women who may miss out on treatment because they are not able to return to the clinic at another time

VIA + CRYOSURGERY

- Colposcopy of the vagina and cervix is performed with the application of acetic acid.
- Cervical punch biopsies are used selectively to confirm histologically the diagnosis of CIN. This also permits identification of the size, shape, and location of the dysplastic lesion
- Prior to cryosurgery confirm that the lesion does not extend into the endocervical canal because this reduces the likelihood of success for the procedure .
- **The equipment required to perform cervical cryosurgery is as follows:**
 - **Appropriately sized vaginal specula**
 - **Adequate light source**
 - **Refrigerant source - Liquid nitrous oxide**
 - **Cervical probes in a variety of sizes**
 - **Lubricant**
 - **Topical hemostatic agents**

WHO IS PROF. F.A. DUROSINMI-ETTI, OFR?

- Professor Francis Abayomi Durosinmi-Etti (OFR) was born on 11 January 1948 in Kaduna State to the illustrious Durosinmi-Etti Royal Chieftancy family of Lagos State.
- He attended St. Paul's Catholic school, (EB) Lagos for his primary education and Secondary school education at Egbado College Ilaro where he passed the West African School Certificate examination with distinctions in Division One in 1965.
- He successfully completed his A-Level course in Physics, Chemistry and Zoology in only one year at the Federal School of Science Lagos (June 1966 - July 1967).
- He gained admission into the College of Medicine, University of Lagos 1967 from where he graduated as a Medical Doctor in June 1972. He worked as a junior doctor at LUTH from where he proceeded to the Christie Hospital Manchester, (University of Manchester) England between 1975 and 1979 for his specialist postgraduate training and qualifications in Radiation Therapy and Oncology. (Specialist in cancer treatment)



- He had additional working experience as Registrar and Senior Registrar at other major Cancer specialist hospitals in the UK such as the **Cookridge Hospital Leeds** and **Clatterbridge Hospital, Liverpool, England** before returning home in 1980 where he was soon appointed a Lecturer Grade One at the College of Medicine University of Lagos and Consultant in Radiation therapy and Oncology (Cancer Specialist) to LUTH.

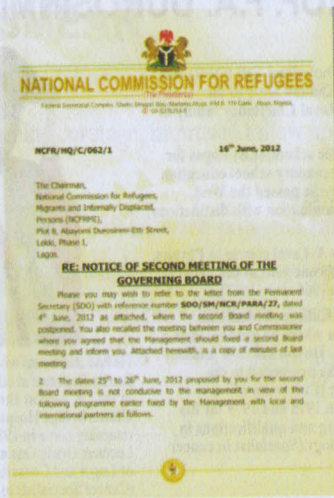
CALL TO PUBLIC SERVICE

- **Pioneer Chief Medical Director/CEO, National Hospital Abuja;- Presidency**
- **Secretary to the Federal Character Commission;- Presidency**
- **Chairman National Commission for Refugees and IDPs - Presidency;**
- **Chairman Federal Medical Centre , Lagos;- FMOH.**
- **Chairman National Advisory Committee on Cancer Control- FMOH.**
- **Chairman Medical Physicists Temporary Registration Committee. FMOH**
- **Pioneer Director Cancer Dept; Korle-Bu Teaching Hospital .Accra. Ghana.**



FEDERAL
CHARACTER
COMMISSION

NATIONAL COMMISSION FOR REFUGEES



MY PHILOSOPHY ABOUT LIFE

- DO UNTO OTHERS AS YOU WOULD HAVE THEM DO UNTO YOU.
- NEVER HOLD BACK A HELPING HAND IF IT IS WITHIN YOUR POWER TO DO SO.
- ALL GLORY, POWER, HONOUR, DOMINION AND MAJESTY BELONG TO GOD



PART OF MY PRIVATE LIFE

- Winner of Several Local and International awards including :
'OFFICER OF THE ORDER OF THE FEDERAL REPUBLIC' – OFR
- HOBBIES :** Squash and Golf.
FARMER : Cassava processed into Flour for confectionery; Garri.
Cat Fish Farming and Processing
Piggery; Snailery
Various Vegetables out of season.
- FAMILY MAN WITH MANY CHILDREN AND GRAND CHILDREN.**

WITH WIFE AND GRANDCHILDREN



THE WHOLE CLAN - THREE GENERATIONS



WHO IS - PROFESSOR FA DUROSINIEMI-ETTI?

Professor Francis Abayomi Durosiniemi-Etti (OFR) was born on 11 January, 1948 in Kaduna State to the illustrious Durosiniemi-Etti Royal Chieftaincy family of Lagos.

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He had additional working experience as Registrar and Senior Registrar at other major Cancer specialist hospitals in the UK such as the Cookridge Hospital Leeds and Clatterbridge Hospital, Liverpool, England before returning home in 1980 where he was soon appointed a Lecturer Grade One at the College of Medicine University of Lagos and Consultant in Radiation therapy and Oncology (Cancer Specialist) to LUTH.

Professor Durosiniemi-Etti was appointed in 1988 by the United Nations, International Atomic Energy Agency (IAEA) in Vienna, Austria as a Radiotherapy (Cancer) Specialist charged with the overall worldwide activities of the IAEA in the field of Radiotherapy. His activities included training, research and clinical treatment of cancer patients. He held

this position between 1988 and 1995 during which period he was largely instrumental to the development of the specialty in 45 developing countries of the world spanning Africa, Asia, Pacific, Eastern Europe and Latin America among several others.

Major Radiotherapy hospitals in some of the following countries still bear his influence especially in the areas of training and development of modern radiotherapy practices and facilities for the treatment of cancer: Nigeria, Ghana, Morocco, Zimbabwe, Namibia, Cameroon, Egypt, Tanzania, and Uganda. Others include: Bolivia, Nicaragua, Panama, Peru, Pakistan, India, Poland, France, UK, etc.

He has several Academic publications to his credit in peer reviewed local and International journals. He was also involved in the design and development of the AMRA Low Dose Rate Brachytherapy machine in France and the CERVIFIX machine by Engr. Mario Gallo in Italy. These machines were designed and adapted for use in the developing countries worldwide, including LUTH, ABUTH and National Hospital Abuja, for the treatment of cancer of the cervix in women.

Professor Durosinmi-Etti is certainly one of the best known Cancer Experts of African origins in the world today. He served as the only black African on the Board of ICEDOC (an International cancer organisation). He initiated the formation of the African Radiation Oncology Group (AFROG) where he served as the Pioneer Secretary General. AFROG still receives support from the IAEA and WHO for the overall interest and benefit of Radiation Oncologists all over Africa.

On the home front, Professor Durosinmi-Etti is the first full Professor of Radiation therapy and Oncology appointed by the University of Lagos or by any other University in Nigeria.

He has served Nigeria at various other levels including his position as the Pioneer Chief Medical Director and Chief Executive Officer of the prestigious National Hospital, Abuja.

He is the Chairman of the National Consultative Committee on Cancer Control charged with the formulation of a National Cancer management and control policy for Nigeria under the Federal Ministry of Health. This National Cancer Control Plan is currently being implemented by the Federal Ministry of Health in Nigeria.

He was the Technical Adviser to the new N10 Billion Naira International Cancer Centre built in Abuja and expected to commence operation soon. He also serves as the Chairman Medical Physicists temporary registration Committee of the Federal Ministry of Health.

Professor Durosinmi-Etti is the current President of Cancer Education and Advocacy Foundation of Nigeria (CEAFON). The NGO has just produced the draft for National Guidelines for treatment of Breast Cancer in Nigeria.

He was appointed by the President of the Federal Republic of Nigeria in 2003 as Secretary to the Federal Character Commission, under the Presidency in Abuja, a position which he voluntarily relinquished on 14 October 2011.

He was a former Chairman of the Board of National Commission for Refugees and Internally Displaced Persons in Nigeria.

Professor Durosinmi-Etti has extensive administrative experience at International and local levels and well versed with the Public Service Rules and Procedures.

He is a fellow and member of several local and International Professional Associations. He has also received several local and International awards including the highly

prestigious Officer of the Order of the Federal Republic. (OFR)

Professor Abayomi Durosinmi-Etti's hobbies include Farming, Golf and Squash.

He is happily married to Ibilola Durosinmi-Etti for 44 years and they have many children and grandchildren.

CONCLUSIONS

Mr Vice Chancellor Sir, I have tried to limit the usually repetitive issues about Cancer, its causes, treatment and prevention by focusing more on issues of historical importance with respect to Radiotherapy in Cancer Management and Research at the Lagos University Teaching Hospital and the College of Medicine of the University of Lagos being the oldest Cancer treatment, Nuclear Medicine and Research Institution in Nigeria for the sake of posterity. With the apparent and unfolding rise in the incidence of Cancer worldwide along with the Globocan estimation that by 2030 almost 1 in 2 persons would likely develop one form of cancer or another due among other possible causes, to our increasing longevity, it is likely that the Radiotherapy Section of the RBRR and R Department would become even more relevant among other reputable Health care facilities in Nigeria.

The emphasis in this Inaugural lecture on the Historical facts deriving from my Odyssey being a member of the second generation of Radiation Oncologists at the Department would offer some base line against which future developments and expertise could be measured. This is considering the fact that virtually all the major players in all the other existing Radiotherapy Centres in Nigeria at present have passed through our Department at one point or the other. These include: Radiation Oncologists, Medical Physicists, Oncology Nurses, Therapy Radiographers, Dosimetrists etc.

Mr Vice Chancellor Sir, I would have spent a total of 43 years out of my 49 years at the College of Medicine, University of Lagos since 1967 when I came in as a Medical student in this Department by the 1st of July this year. This certainly makes me the oldest serving member of the Department to date. Some members of our staff fondly refer to me as BABA and when this was first said to my hearing, I wondered who they were calling Baba. I now realise that I am really qualified to be called Baba even though all seemed like yesterday to me.

I feel eligible therefore to be in a position to document the History of Radiotherapy in Cancer management in Nigeria over the past 43 years during which I am involved so that WE MAY OVERCOME CANCER which is the topic of my Inaugural lecture today.

At this point, I gratefully acknowledge that some people laid the Foundation long before I joined the Department in 1973. I am sure that the Grandfather and pioneer Radiation Oncologist in Nigeria and West Africa – Professor JTK Duncan would be able to provide us with the more important details between 1968 and 1973 and the roles of great men and Non-Radiation Oncologists, like:

- Professor Oritsejomi Thomas – (Former Provost, CMD; and Vice-Chancellor, University of Ibadan);
- Prof Kurt Solomon: - Radiobiologist and Pioneer Head of Department; and
- Prof Augustine Fregene- Medical Physicist.

I wish also to pay my respect once again to my seniors and contemporaries in the Radiation Oncology Specialty in Nigeria, though some of them did not pass through our University and Department: These include:

- Prof Josbert Thomas Kofi Duncan.
- Dr Abayomi Sobo – Nigerian and pioneer Cancer Centre in Liberia.
- Professor DOS Ajayi of Blessed Memory.

- Dr A. Agboola - Had his Basic Medical training at UCH. Specialist training in Canada where he still lives and worked. He returned briefly to UCH in the early 70s and started Clinical Brachytherapy at UCH before the advent of their Cobalt -60 Teletherapy unit.
- Prof. Bunmi Abayomi - My Classmate at the CMUL; trained and still works as a Radiation Oncologist in America.

Vice Chancellor Sir, I want to end this Inaugural lecture by reassuring you and my distinguished audience that the Department holds greater promise for the future in our struggle **THAT WE MAY OVERCOME CANCER.**

It is also my humble opinion the quality of Teaching, Research and Clinical services we offer are improving but they could still be better if we are able to overcome most of the rather basic infrastructural problems that we face just like any of the other existing eight Radiotherapy centres or any other major Hospitals in Nigeria. I have deliberately limited my discussion to Radiotherapy alone among the other multimodal treatments available for managing cancer.

The problems with Radiotherapy practice in Nigeria have been highlighted severally in many other publications and they include among others the following:

1. Inadequate equipment for Teletherapy and Brachytherapy. Nigeria needs at least 200 Teletherapy machines going by the IAEA recommendation of 500 people per Megavoltage Machine. We have nine such machines in Nigeria at present. This is a ratio of about 20 Million population per machine compared with UK with 1 Million population having access to 3.4 Machines; USA with 1 Million population having access to 8.2 machines; Nigeria unfortunately has 20 Million population having access to 1 Machine.
2. Frequent breakdown of equipment mostly due to erratic power supply; dust and the humidity among

other factors. It is known that only two out of the Nine radiotherapy Machines and accessories in Nigeria are partly functional at present.

3. Poor maintenance culture often due to lack of adequate funding.
4. Urgent need for Training and retraining of staff on newer treatment planning techniques etc.

The good news Mr Vice Chancellor Sir is that, all these problems could be effectively tackled.

RECOMMENDATIONS

Radiotherapy will continue to play a major role in our quest to Overcome Cancer as it is needed by at least 50% of all cancer patients at one time or the other during the management of their disease. Being the foremost Radiotherapy centre in Nigeria, the University of Lagos and the Teaching Hospital must continue to support internal and external efforts including Government's initiative to keep the services up to date.

The possibility of Private Public Partnership (PPP) must be supported after due diligence and satisfactory terms. This will guarantee provision and regular servicing of the equipment provided.

The Department had the first Nuclear Medicine Section in Nigeria and was in the late 60s and early 70s involved in the use of Rectilinear scanner for isotope based bone scans (whole body); various hormonal assays including thyroid function tests etc. The basic infrastructural laboratories are still in place and may need to be refurbished and modernised. The IAEA is currently training some of our staff in South Africa and more could still be trained. I humbly recommend that the University and the LUTH authorities should consider the resuscitation of this highly sought after service which will also be a good revenue generator. We send patients to Abuja or Ibadan at present. A PPP

arrangement should also be considered with external investors. This will help us regain our position as the pioneer Nuclear Medicine Centre in Nigeria.

The Radiotherapy Block was built with provision for a High Dose Rate Brachytherapy suite complete with its own operating theatre. This treatment facility which is also in high demand should be resuscitated. It will not only provide the clinical service which is lacking at present but help in training of future specialists as well as research. A PPP arrangement may also be considered.

Mr Vice Chancellor Sir, I wish to call on the Government to set up a **Task Force** to rehabilitate and resuscitate all the moribund radiotherapy services in the country. The problems with many of the machines could be managed under careful planning and in collaboration with the manufacturers or their representatives. Involvement of a Public Private Partnership scheme should also be considered.

Treating Cancer is a very expensive venture. We have only looked into the use of Radiotherapy at this lecture. Other modalities include Chemotherapy; Hormonal therapies; Biological and the newer Targeted therapies. These treatment modalities singly or in combination are beyond the reach of most Nigerians. I humbly recommend that CANCER treatment be included in part or as a whole under the on-going National Health Insurance Scheme.

Pharmaceutical companies involved in cancer drugs should be given some tax free incentives to make the drugs affordable. A typical cost of some anticancer drugs was shown earlier. Costing was before the current fall in the value of our Naira. The prices would have risen by over 80% as at today.

ACKNOWLEDGEMENTS

Mr Vice Chancellor Sir, my distinguished audience, I have had a very interesting ODYSSEY as a RADIATION ONCOLOGIST over the past 43 years collaborating with my colleagues in Nigeria and much more Internationally so that WE MAY OVERCOME CANCER. The journey is still on and the prospects of victory are becoming more feasible daily.

I am delighted and pledge before you today to redouble my efforts and remain committed to the struggle

I wish to thank God Almighty; The Omnipotent and Great Architect of the Universe. He has been and forever will remain my God and the source of my Strength and Salvation; He is the Alpha and Omega. To Him alone be all the Glory; Honour; Dominion, Might and Majesty forever and ever through our Lord and Saviour, Jesus Christ. Amen.

I wish also to thank all my Teachers from Primary, Secondary, Higher School through the University and my Postgraduate education and training. I feel honoured by the presence of some of you here this afternoon. May God continue to Bless you and your family.

At this juncture, I must publicly thank the Past Chairmen and Members of the University Council especially the past Vice Chancellors and the past Chief Medical Directors of Lagos University Teaching Hospital and their managements who have all in one way or the other had given me the opportunity to be properly trained and gave approval for my release to serve the Nation and the International Community in the various ways as already discussed.

My very deep gratitude to the current Chairman and Members of Council, to our indefatigable Pro-Chancellor, Prof Jerry Gana, CFR; to my brilliant and hardworking Vice Chancellor, Professor Rahmon Adisa Bello (FAS). I called him brilliant because we both attended the same boarding

Secondary School – Egbado College Ilaro in Ogun State where this great man always came first in his class with distinction grades in all subjects. I was a year ahead of him and I want to reveal this secret which he may be hearing for the first time. There were some of us in my set (1961-1965) who were sure that we would definitely pass the West African School Certificate in Division One which many of us actually did.

However, we counted ourselves lucky that Rahmon was not in our set as he would have made “nonsense” of our own Division One because everyone knew he would pass out in Grade One with Distinction in every subject. He proved us right but allowed us to savour our own Grade One. He had been consistent as he equally graduated with a First Class degree from this great University. He is a truly great and Brilliant man yet very humble. My Vice Chancellor Sir, I am proud to be associated with you over so many years and very grateful for your support and approval of this Inaugural lecture. Thank you Sir.

I am also grateful to our immediate past Deputy Vice Chancellor (Academics and Research) – Professor Babajide Alo with whom I enjoyed some special relationship particularly through his wife who also attended Egbado College Ilaro.

I wish to thank the Deputy VC, (MS) – Prof Duro Oni, the current Deputy Vice Chancellor, (A&R) – Professor Toyin Ogundipe and all other members of the University Management.

I am very grateful to all the former Provosts and Deans-School and later Faculty of Clinical Sciences. I know I enjoyed special favours in different ways which I cannot enumerate here from each of you. May God continue to Bless each and every one of you and your families.

I am equally grateful to our current Provost – Professor Folasade Ogunsola. You have been a Provost with a Distinction and I urge you to redouble your efforts as I can safely prophesy that the University and indeed Nigeria would certainly call on you for higher services in the nearest future.

The incumbent Dean Faculty of Clinical Sciences – Prof Folabi Lesi, I am equally very grateful to you for your support at all times. Your father, Prof FEA Lesi was one of my teachers at the CMUL and a great mentor. I urge you too to keep up your good works as I boldly prophesy that the University and indeed Nigeria would need your services at a higher level very soon. I am grateful for your support as well as those of other Deans.

I want to specially appreciate all the Past Board Chairmen, Chief Medical Directors and Management of the Lagos University Teaching Hospital for facilitating my odyssey at different stages. I served briefly as CMAC and Ag. Chief Medical Director for a few months which definitely prepared me for my later role as the Pioneer Chief Medical Director and CEO of the National Hospital, then under the Office of the Presidency Abuja.

The current CMD, Professor Chris Bode and the Management have always been very supportive of me and the Radiotherapy Section whenever we have any problems especially during machine breakdowns. I am equally grateful to other LUTH Management and staff members here present for their support.

I am very grateful to my old school mates here present – from Primary and Secondary schools through University. You are my true brothers, sisters, friends and confidant. May God continue to grant us all, longer life and in good health.

The preparation for this one hour Inaugural lecture took a lot of preparation. This was made possible by my colleagues in the Department especially members of the 20- Man Organising Committee. I want to specially recognise all the members of the Committee led by Prof AT Ajekigbe. Other members include Dr Tonia Sowunmi; Dr Nicholas Irurhe, Dr Omolola Salako, Dr M.Y.M. Habeebu, Dr Wumi Alabi, Dr Okoro, Dr Yakubu, Dr O.A. Omidiji, Dr Adegboyega, Dr Dayo Joseph, Matron Tina Olumese, Matron Abayomi-Banjo, Mr LC Abonyi, Mr Ogunbamise, Dr Olatunji, Mrs Osungbesan, Mr Saba, Mr C.U.Eze and Mr A. Z. Ibitoye.

I am humbled and very grateful for your deep commitment in seeing the arrangements successfully through.

Charity begins from home: At this point let me formally recognise and thank all members of the Etti Royal Chieftaincy Family of Lagos led by the **Etti of Lagos** – Alhaji Tajudeen Durosinmi-Etti ably supported by some of his other Colleagues and White Cap Chiefs of Lagos.

Please convey my deep gratitude to our Father His Royal Majesty, Kabiyesi, Alayeluwa Oba Rilwan Babatunde Osuolale Aremu Akiolu I, CFR, the Oba of Lagos for allowing you to grace this occasion. Long may he reign over us.

I thank my other Brothers here present- Olori Ebi, Alhaji and Mrs Shamsideen Etti, Barrister and Mrs Dapo Durosinmi-Etti, Mr and Mrs. Tunde Durosinmi-Etti- Honourable Commissioner for Wealth Creation; Mr and Dr Mrs Titi Goncalves (nee Durosinmi-Etti); Mr and Mrs Tokunboh Olukoya (nee Durosinmi-Etti); Barrister and Mrs Lukman Durosinmi-Etti; Mr and Mrs Kehinde Durosinmi-Etti former MD SKYE Bank Mr Folabi and Mrs Taiwo Caxton-Martins (nee Durosinmi-tti) and all others who are here to support me today.

I wish to give a very Special recognition and gratitude to Otunba Tunji Durosinmi-Etti and his wife Yemi who are currently in America and unable to be here physically. I thank you for your great support and concern to ensure the success of this lecture which is the first of its type to be given by any member of the family.

I wish to thank my Children and their families based in England, Barrister Ladi and Mrs Kin-man Durosinmi-Etti, Engr. Femi and Barrister (Mrs) Enida Durosinmi-Etti who are unable to be present here. I am grateful for your kind goodwill messages of support.

A big thank you to all my other numerous Children in Nigeria, Biola, Tiwatope Tutu, Gbenga, Tobi and others – (Biological, Adopted, Professional, Affiliated etc.) Many of you are here and others elsewhere in Nigeria and overseas. I appreciate you all.

I cannot end this without acknowledging the contributions of my adorable, lovely and faithful wife of 44 years, now my mother, and mother of my Children; my help mate and friend- **Mrs Ibilola Ayinke Durosinmi-Etti (nee Williams)**. I thank God for making you my wife and I promise afresh that I will continue to Love, Cherish and adore you forever. Surely this lecture would not have been possible if my home front is unstable. May God continue to Bless you my darling wife.

Finally Vice Chancellor Sir and my distinguished audience this is the end of my Inaugural lecture.

Thank you.

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