



SUSTAINABILITY AS A CHALLENGE TO RADIOTHERAPY IN NIGERIA

By

Professor. S. B. Elegba

Director-General/CEO

NIGERIAN NUCLEAR REGULATORY AUTHORITY

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THE NIGERIAN SITUATION

2002 to 2003- Radiation Protection Audit in
Radiotherapy Centres

- **5 Radiotherapy centres for a population of 140 million, i.e. 1 machine to 28 million**
- **About 100,000 new cases are diagnosed/yr**
- **Cancer register not updated since 1999**
- **Services are poor and serve poor patients**
- **Affluent patients seek treatment abroad**



LEGISLATIVE AND REGULATORY INFRASTRUCTURE

- ✓ **The Medical and Dental Practitioners Act
Cap 2221 of 1990 amended by Decree 78
of 1992.**
- ✓ **Radiographers Registration Board of
Nigeria Decree 1987.**
- ✓ **Nuclear Safety and Radiation Protection
Act 1995**
- ✓ **Nigerian Nuclear Regulatory Authority
2001**
- ✓ **Nigerian Basic Ionizing Radiation
Regulations 2003**
- ✓ **Guidance on Radiation Protection In**



RADIATION PROTECTION AUDIT REPORT OF RADIOTHERAPY PRACTICE

- ✓ Personnel
- ✓ Equipment and Machines
- ✓ Premises
- ✓ Procedure
- ✓ Management



Personnel

- Inadequate number of cadres
 - Oncologists/Medical Physicist/Radiographers
- ▼ Inadequate level of competence
- ▼ High patient-to-expert ratio in radiotherapy



Equipment and Machines

- ▼ Obsolete
- ▼ Second hand, without manuals or parts
- ▼ Poorly maintained
- ▼ Unaccredited maintenance group
- ▼ Lack of accessories as against spare parts



Premises

- ✓ Location
- ✓ Little or no shielding materials
- ✓ Re-configuration without drawings
- ✓ Lack of records



Procedure

- ▼ Lack of Operational Manual
- ▼ Lack of Radiation protection programme
- ▼ Lack of Quality Assurance Manual
- ▼ Lack of Radiological Emergency Plan



Management

- ✓ Lack of structured communication channel between management and the operating unit
- ✓ Lack of programme for equipment maintenance and replacement
- ✓ Lack of financial plan budget for the operation and maintenance of the facilities
- ✓ Lack of commitment from management to radiation protection and safety
- ✓ Inadequate communication between management and facility owners.



RADIOTHERAPY PARADIGM

- ▼ Availability of Patients - Y
- ▼ Affordability of Service - Y?
- ▼ Consumer Satisfaction - N
- ▼ Sustainability of Practice - N



Issue of Sustainability



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Meeting the needs of the present generation without compromising the needs of future generations



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*The triple bottom line: economic, social,
environmental*



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- National Policy of Integrating Radiotherapy into the National Cancer Control Programme in 2005
- International Conference on Radiation Safety in Cancer diagnosis and Therapy, 11-14 April 2006