

# **REPORT ON: Regional workshop to raise awareness on medical physicists' roles in ensuring safety in imaging- with emphasis on pediatric imaging. Dar es Salaam, Republic of Tanzania. 26th - 28th November 2014.**

The workshop was organized by the International Atomic Energy Agency (IAEA) in cooperation with the World Health Organization (WHO) and supported by the Government of Tanzania under AFRA project RAF-6048.

Participants at the workshop include Medical physicists (MPs) and senior officials of the Health ministries of 26 African Countries, Officers of the Ocean Road cancer Institute, Tanzania, and the Africa representative of the International Atomic Energy Agency and the World Health organization officials as well as experts from Europe and the United States of America.

**Main focus of the workshop- To raise Awareness on Medical Physicist Roles in Ensuring Safety in Medical Imaging.**

## **Day 1, Wednesday 26th November 2014**

Participants and Experts, the International atomic energy agency and the World health organization representatives were welcome by Dr. Diwani Msemo, Acting Executive director of the Ocean Road Cancer Institute welcome to the workshop. This was followed by WHO and IAEA statements by WHO Tanzania representative and IAEA director for Africa respectively.

Afterwards there was statement presentation by the Ministry of Health and social welfare, republic of Tanzania, followed by the official opening of the regional workshop by His Excellency, Dr. Mohamed G. Bilal Vice President of the republic of Tanzania.

The technical session thereafter dealt with the following topics;

- The need and responsibilities of Medical physicists in medical imaging.
- Benefits of multidisciplinary approach in medical imaging.
- Radiation safety in Medicine- the Bonn call for action- by Maria Perez from WHO.
- IAEA BSS and guidelines- defining the role of Medical physicists.
- European Medical exposure directive and BSS provisions related to Medical physics experts.
- Regulations and Compliance on radiation medicine- Tanzania experience.
- Medical physics education and training- international perspective.
- Medical education and training in Africa- Current status and future prospects. A round of discussion brought the 1st day to a close.

## **Day 2, Thursday 27th November 2014**

The technical session commenced by 8; 30 a.m. with presentations on;

-Industrial innovations for improving clinical outcomes with low dose CT technologies- GE Healthcare's solution.

-Child imaging safety: who and how- A. Adekanmi representing WFPI/ Image Gently.

-Radiation protection of children and pregnant women- USA experience.

-Dose optimization in nuclear medicine.

-Dose optimization in Diagnostic radiology.

-Raising awareness about Medical physicist role in Africa. Updates on African Medical Physicists Database.

-Presentation of Country situations.

-IAEA support on Medical imaging: Current and future areas of cooperation.

Discussion on the future activities and action plan to increase the contributions of medical physicists in Ensuring safety in Medical imaging in Africa by all participants followed. Suggestions and recommendations about the MPs roles, and the need for medical physics in imaging and inclusion of MPs in the imaging professional cadre in all African Countries closed the day 2.

## **Day 3, Friday 28th November 2014**

Friday morning was devoted to drafting the Declaration: Statement and recommendations of the regional workshop by the participants. This was followed by review and adoption of the Workshop declaration and official closing by the Tanzania's Minister of Health.

### Conclusion

Considering the impact of radiation hazards in the African population, where data of radiation exposure is often lacking. Noting that children are more radiosensitive with longer years to express non deterministic biological effects of radiation, if any. And in view of the rapidly developing technological advances with newer radiological equipment with Africa acquiring more high tech imaging modalities. There is great need for advocacy and education on radiation effects focused on imaging professionals, referring physicians and the public, on the roles of Medical physicist and the urgent need of MPs inclusion into the medical imaging professionals in all African countries. There is also need for research into radiation doses in African countries for baseline and prognostication, thereby enhancing patient safety.