



GTRFCC

UICC PRESIDENT'S PORTFOLIO
GLOBAL TASK FORCE ON RADIOTHERAPY FOR
CANCER CONTROL

Global Task Force on Radiotherapy for Cancer Control: ASCO Consultation Meeting

Background:

The Global Task Force on Radiotherapy for Cancer Control (GTRFCC) held a 90 minute session at the 50th Annual Meeting of the American Society of Clinical Oncology on June 2nd, 2014. The purpose of this meeting was to inform the broader oncology community on the purpose and activities of the Task Force, consult with global experts on the needs of lower to middle income countries (LMICs) for cancer control, and discuss possible system-level solutions to address the issues around providing adequate cancer care globally.

In addition to the group discussions GlobalRT (<http://globalrt.org/>), an initiative led by the Young Leaders of the GTRFCC, was officially launched. GlobalRT is a movement to tie together the radiation oncology community to demystify and educate the public about radiation therapy.

Dr. Michael Milosevic chaired the meeting and the following is a summary of the two panel discussions.

Panel 1: Challenges of Treating Cancer in LMICs

Panelists:

Patrick Loehr, MD is director of the Indiana University Melvin and Bren Simon Cancer Center and the H.H. Gregg Professor of Oncology and Associate Dean for cancer research at the Indiana University School of Medicine. He leads the AMPATH (Academic Model for Providing Access to Healthcare) initiative to improve access to and the quality of healthcare in Kenya.

Lawrence Shulman, MD is Chief for Medical Affairs, and Chief, Division of General Oncology, Department of Medical Oncology at Dana-Farber Cancer Institute. He works closely with Partners in Health, where he is Senior Advisor in Oncology, helping to lead the development of a structured cancer program for their resource-limited healthcare sites in Rwanda, Malawi and Haiti.

Verna Vanderpuye, MD is a radiation oncologist at Korle Bu Teaching Hospital in Accra, Ghana. She is representative for sub-Saharan Africa for the European Society for Medical Oncology with a special interest in palliative care.

Comments from the Panel:

Numerous challenges relating to a lack of infrastructure were identified by the panel. The complete lack of radiotherapy equipment is a challenge in LMICs. Radiotherapy for the treatment and palliation of cancer was identified as the number one gap in cancer care in LMICs by one of the panelist. Other infrastructure challenges identified by the panel include the difficulty for patients to travel for treatments, difficulty in maintaining existing radiotherapy equipment in LMICs, and embargos on shipping Co-60 sources. Education and limitations in human resources is another challenge for radiotherapy in LMICs. For this gap, the panel stated exchange problems between developed countries and LMICs to develop cancer programs have shown to be an effective means of knowledge transfer.

Outside of radiotherapy, other challenges for cancer control in LMICs included the lack of accessibility to Trastuzumab, internal politics and the lack of accountability, and poor diagnostic, surgery and chemotherapy programs. Communicable diseases are still not a focus in LMICs but the panel recognizes that cancer and HIV are poised to change places in history. A cancer control microcosm is developing in LMICs, opening the doors for a wider adoption of cancer control strategies.

Comments from the audience:

Education and training was much discussed by attendees. They noted that there are challenges to transferring knowledge even when training programs to support LMICs are established. For example, South Africa has been participating in training programs supported by the IAEA. Trainees from LMICs are funded to receive training in South Africa, however not all trainees return to their home countries and thus LMICs do not benefit from the programs. An attendee from Zimbabwe commented that the development of training programs within LMICs themselves should be established. Investment into the training of local doctors will empower their own people to help each other.

An attendee from Brazil said that different models need to be implemented to bridge the gap in radiotherapy. They described an industry/government partnership in Brazil, a country which recognized the gap. Brazil is making radiotherapy more accessible to their people with a purchase of 80 radiotherapy machines. Varian has partnered with the Brazilian government to implement this program and has invested into the country by building a manufacturing plant. However, attendees noted that overall there is a lack of political support to fund radiotherapy. International governments need to contribute and patient and public advocates will be important to push this agenda forward. For example the "Bring back our girls campaign" did not receive any traction until there was public and international pressure to do so.



Panel 2- System approach for Cancer Control: Opportunities and Challenges

Panelists:

Julie Gralow, MD is a professor of medical oncology at UW Medicine, director of Breast Medical Oncology at the Seattle Cancer Care Alliance and a member of the Clinical Research Division at Fred Hutchinson Cancer Research Center. She co-chairs the Southwest Oncology Group's Breast Cancer Center Committee and chairs the Patient Communication Committee of the American Society of Clinical Oncology.

Allen Litcher, MD is the Chief Executive Officer of the American Society of Clinical Oncology and the Conquer Cancer Foundation of ASCO. He has been an ASCO member since 1980. Dr. Litcher's research and development of three-dimensional treatment planning led to a Gold Medal from the American Society for Radiation Oncology. In 2002, he was elected to membership in the Institute of Medicine of the National Academies of Science.

Edward Trimble, MD MPH is Director of the NCI's Center for Global Health (CGH). He has been recognized internationally as an expert in prevention, screening, treatment, and symptom management for women with cervical, ovarian, uterine, and other gynecologic cancers.

Comments from the Panel:

Two themes for cancer control were recognized by the panel. Theme 1: Prevention and screening and Theme 2: A comprehensive cancer care score is needed to ensure quality in screening, diagnostic workup and other therapies in the management of cancer. Radiation therapy should develop a strategy to 'fit' into the broader investment scheme. Radiation therapy as part of a cancer control strategy is a gap that is missing globally and not just confined to LMICs.

Training and education on radiation therapy, to both members of the public and care providers, was also recognized by Panel 2 as a key component in overcoming the inequity gap. Patients and the public need to recognize that radiation is a key component in treatment and prevention of cancer. The radiation oncology community needs to be engaged in communicating the value of radiation to the patient. Breast cancer is good example of the essential role of radiotherapy. Training programs in the Western world, 5+ years of post-graduate training, will likely not work in LMICs. Alternative training programs, a web based approached or rules-based approach as proposed by Christensen at Harvard, should be explored.

Comments from the Audience:

A representative from the WHO recognized that they have not been very active in supporting radiotherapy. Thus work of the GTRFCC is very timely. The IAEA's attempts at implementation without 'solid knowledge', specifically there have been 40 IAEA investments into radiotherapy, has not yielded much impact. The WHO are appreciative of having a group of experts to help WHO give more specific advice on which situations and in which countries should an investment be made.

Attendees also agree with the panel that education at all levels, government, patients, care givers, and the public, requires attention. There are countries like Peru that recognize the need for cancer control. A national cancer event was opened by the president and closed by the first lady. They recognize their financial obligations and the need for cervix cancer screening. They know that multiple components are needed to succeed but Peruvian understanding and support of the problem is not common in other states. Political support with a legal framework to provide a balanced investment into cancer services is required and Ministries of Health need to be told that cancer is important. Machines need to be set up to kick start the implementation of any radiotherapy program and the IAEA has been helpful in this regard. The lack of radiotherapy is not limited to LMICs and many patients in developed nations do not have proper access to radiotherapy. Awareness of the need is happening but radiotherapy needs to be adapted to match the local capacity to deliver comprehensive cancer care. It is important not to impose a particular practice model on LMICs. Specialties in radiation oncology and medical oncology works in developed countries, but in LMICs training Clinical Oncologists might be a better solution. This model, the paired training of Medical and Radiation Oncologist, is one that ASCO has developed and implemented in Ethiopia and can be emulated elsewhere. In addition to novel models of training, other models of delivering care should also be considered. Israel, where radiotherapy is recognized as a curative treatment for cervical cancer, sends their patients to other countries for treatment to meet the demand for the radiotherapy. This is an example of alternative means of bridging the radiotherapy gap.

Key messages from the meeting:

- ❖ There is a need for increased awareness about radiation therapy at all levels, patient, public, government/ NGO.
- ❖ Limited access to equipment is an important, but not the only hindrance to the implementation of radiation therapy in LMICs.
- ❖ Education and knowledge translation is one the most important aspects of radiotherapy adoption. New models of training must be developed.