EXTENDING INTERNATIONAL OUTREACH

The need for making imaging safer for children in large parts of the world with scant professional resources in terms of pediatric radiologists, appropriately skilled medical physicists and technologist is a challenge. Image Gently® has established a respectable place in large parts of the world through its cooperative actions with various stake holders and international organizations. I had the pleasure of contributing my bit through some actions. These include: assessing the status of radiation doses to children in CT exams [1-5] in 52 countries, implementing optimization actions and assessing impact [3,4], organizing a series of training events in several countries, facilitating creation of networks on radiation protection of children in Asia, Europe and Latin America and organizing awareness sessions for decision makers from various countries. In all these actions Image Gently® was involved. These actions were done through the International Atomic Energy Agency (IAEA) which has traditionally been better known for its nuclear safeguards and nuclear safety actions.

Any momentum on creating awareness and consciousness has the potential to lead to things being driven to an extreme. This has been seen with attention to fat or carbohydrate in diet, as an example. There have also been examples of radiation dose hyperbole from a few facilities known more through anecdotal events rather than many published papers in academic journals. However, a large part of the world needs to adopt what has been the motive and mission of the Image Gently® campaign.

Many people and organizations want to contribute as part of the international team, be it data on doses or practices or their achievements in making imaging safer for children. What still can be done? Strategies include collecting success stories and tangible models and letting others learn from those. Image Gently® can provide a forum for this. Extending collaboration with more international organizations such as the International Organization for Medical Physics (IOMP) could be another way. Creating an Image Gently® Recognition for contribution to making children safer in less resourced countries by people within these countries could be yet another way. Periodic virtual meetings with people in less resourced countries perhaps through teaming with Health4theworld.org which has achieved several awards recently is another option to explore. These opportunities have a common goal of serving the patients and professionals where relevant resources are limited or non existent… the very essence of the Image Gently® Alliance.

3. Rehani MM. CT Imaging in large part of the world: What we know and what we can learn. Pediatric Radiology 2014 Oct; 44 Suppl 3:511-514


By: Madan M. Rehani, PhD
Massachusetts General Hospital, Harvard Medical School, Boston
2018 saw a considerable increased presence and partnership with Radiology professionals in South America, particularly in Brazil. Much of this effort was promoted by Dr. Dolores Bustelo, a pediatric radiologist in Paraná, Brazil. Dr. Bustelo worked with dedicated organizations and individuals who have been involved with the mission of Image Gently®.

Brazil has
- 208,917,661 inhabitants
- 65 million Children and Adolescents (Brazilian Pediatric Society information)
- 450,000 active medical doctors working (Federal Council of Medicine information)
- 35,000 Pediatricians (Brazilian Pediatric Society information)

The Image Gently® Campaign was launched in Brazil on October 12th, 2018, that is an emblematic date in Brazil because it is the National Children Day. The Image Gently® Campaign was launched locally by the Brazilian Pediatric Society and has the support of many important medical societies:

- Brazilian College of Radiology - CBR
- Brazilian Council of Medicine - CFM
- Brazilian Medical Association AMB
- Brazilian Society of Orthopedics and Traumatology - SBOT
- Latin Safe
- Latin-American Pediatric Radiology Society - SLARP
- Inter-American College of Radiology - CIR
- World Federation Pediatric Imaging - WFPI

All of the entities supporting the mission of Image Gently® in Brazil will advertise the campaign through their mailings, sending the newsletters that have been prepared by the Brazilian Pediatric Society. Relevant information on radiation use in medical imaging, including radiation protection, can be promoted beyond pediatric and radiology specialties. This signifies that it is possible to reach all the medical doctors in Brazil, beyond pediatricians and radiologists. There are few pediatric radiologists in Brazil and despite the many pediatricians, much of pediatric care is delivered by adult medical doctors.

The Image Gently® Campaign of the Brazilian Pediatric Society started planning in 2016 by the Image Gently® Alliance member, the Pediatric Society of Paraná – SPP, Paraná is a state located in the south of Brazil. Subsequently, this project was presented to the Brazilian Pediatric Society, becoming an Alliance member in 2017. One year later, in 2018, the Image Gently® Campaign has been launched and supported by the organization of all the medical doctors in Brazil, the CFM.

This commitment by all these Medical Societies is very important for the success of Image Gently® Campaign.

Plans for the Image Gently® future in Brazil:
- to take the Image Gently Campaign for the Brazilian Ministry of Medicine
- partner the Brazilian "We at the Inter-American College of Radiology (CIR) are very grateful for your invitation and honored to collaborate in this important alliance, which has among its objectives the promotion of informed use of medical radiation for children. There is no doubt that Image Gently® Alliance’s goals are in tune with CIR’s mission and certainly this agreement between our organizations brings the opportunity to empower efforts in this direction."

~ Henrique Carrete Jr.
President, InterAmerican College of Radiology

By: Dolores Bustelo, MD

The Brazilian Congress of Radiology
L to R: Dr. Alair Sarmet, Dr. Manoel Rocha, Dra. Luciana Rodrigues Souza, Dr. Aldemir Humberto Soares, and Dra. Dolores Bustelo

Physics Society with the Image Gently Alliance

Plans for the Image Gently® future in Latin-American:
- The 100 Million Children Project: to take the partnership between Radiologists and Pediatricians to many countries in Latin America, beyond Brazil. Finally, the Inter-American College of Radiology (CIR) has joined the Alliance.

By: Dolores Bustelo, MD

Where the partnership between Image Gently and the Pediatrics started: The Pediatric Society of Paraná – SPP, Dra. Dolores Bustelo and Dra. Kerstin Taniguchi, President of the SPP.
I want to start by asking you all a question. Have you ever had a time in your life went everything went perfectly? Maybe the weather was perfect for your wedding, a perfect beach, the perfect note from a friend? Well, I have to say that that was our situation when the radiology community embraced the concept of Image Gently®. I was President of the Society for Pediatric Radiology in 2007. That summer after our national meeting, I was on call and a parent asked to speak with me. She wanted to know why her child had to have a head CT scan and she was concerned about radiation. As she spoke, it became clear that we as a profession had work to do in educating parents, as well as medical professionals, about the optimal way to image children. And that encounter planted the seed for the social marketing campaign that would go on to become “Image Gently®.” That summer, we convened a group of pediatric radiologists (Society for Pediatric Radiology-SPR), radiologic technologists (American Society of Radiologic Technologists) and industry (GE Healthcare) and developed the idea of an Alliance to promote radiation safety and education in pediatric imaging. It was magic!

Jennifer Boylan, the then Executive Director of the SPR thought of the name “Image Gently®”. Don Frush, now the Chair of the Image Gently® Alliance, welcomed the concept and threw his impressive reputation as an internationally recognized scientist in radiation protection behind this, adding instant credibility to our group. To Don, I am honored that you have agreed to continue this vital work.

Kimberly Applegate, Jennifer Boylan, Dorothy Bulas, Mike Callahan, and his daughter, our mascot Nora, Brian Coley, Diego Jaramillo, Sue Kaste, Marta Hernanz-Schulman, Neil Johnson, Greg Morrison and Nora Tuggle were there. Soon added was the brilliant pediatric medical physicist Keith Strauss, representing the American Society of Physicists in Medicine, now Vice Chair of IG, who has been so critical to IG’s success from day one. Steve Don, Ted Treves, Susan John, Alan G. Lurie, Ceela McElveny and Manrita Sidhu were all part of the first steering Committee. Simply mentioning their names, does not do justice to the amount of work that these individuals did.

Then we brought the idea to the “big leagues” to a meeting with ACR officers Van Moore and Barry Pressman in the fall of 2007. Also present at the meeting was Dr. James Thrall. What a positive response we received! Later, after the meeting, Dr. Thrall said to me that the best thing that happened at the RSNA meeting was Image Gently®. Little did I know, that hours earlier, he had been awarded the RSNA Gold Medal and he was telling our group that we were the best thing! Unbelievable!

We visited the American College of Radiology and got an enthusiastic response from the late Harvey Neiman. It was our incredible good fortune to be assigned to work with the superb medical physicist Penny Butler, a critical member of our steering committee and advisor from ACR and the wonderfully creative and talented Shawn Farley in ACR communications. We were also fortunate to have the administrative support of Coreen Bell in those first years. Her enthusiasm for our mission was contagious!

It is hard to name all the individuals who helped on each of the campaigns as part of a committees that created content for the website on computed tomography, fluoroscopy, digital radiography, nuclear medicine, interventional radiology, dental radiology and parent education…to you we owe our thanks. To the Alliance partners and the International Atomic Energy Agency (in particular, Madan Rehani), the World Health Organization (especially Maria Perez), the U.S. Food and Drug Administration and other groups who helped us in our mission for best practice in imaging in children. We also had cooperation and enthusiasm from the companies that make imaging equipment as they readily participated in our vendor summits.

To the parents and caregivers of children, and the children themselves who have inspired us to continue working to improve quality and safety in pediatric imaging, we say thank you. And may Image Gently® continue to lead in this field of medicine in providing leadership for decades to come!

By: Marilyn J. Goske, MD

Adapted from the American College of Radiology Gold Medal acceptance speech, May 20, 2018, Washington, DC
NEW STEERING COMMITTEE MEMBERS

Dr. Samuel Brady is an Associate Professor of Radiology at the University of Cincinnati School of Medicine in Cincinnati, Ohio and medical physicist at Cincinnati Children's Hospital. His research interests include the optimization of ionizing radiation to achieve the highest diagnostic image quality at the lowest possible radiation dose for imaging of children, and the development of Big Data applications for improved visualization and prognostic power in Radiology. His leadership in professional organizations includes the American Association of Physicians in Medicine (AAPM), American College of Radiology (ACR), and International Atomic Energy Agency (IAEA).

Frederic H. Fahey, DSc has been the Director of Nuclear Medicine/PET Physics at Boston Children’s Hospital since 2003 and is a Professor of Radiology at Harvard Medical School. He received his Doctor of Science from the Harvard School of Public Health in Medical Radiological Physics in 1986. Dr. Fahey is certified in nuclear medical physics by the American Board of Radiology. Prior to coming to Boston Children’s Hospital, he had worked at Georgetown School of Medicine from 1984 to 1991 and Wake Forest School of Medicine from 1991 to 2003. He served as president of the Society of Nuclear Medicine and Molecular Imaging in 2012-2013. He is currently the SNMMI liaison to the Department of Energy Nuclear Sciences Advisory Committee. He is a consultant to the International Atomic Energy Agency and sits on the Nuclear Medicine Technologist Certification Board. He is a fellow of the Society of Nuclear Medicine and Molecular Imaging, the American College of Radiology and the American Association of Physicists in Medicine. His research interests include PET and SPECT instrumentation, image processing, reconstruction of tomographic data and the radiation dosimetry, particularly in the realm of pediatric nuclear medicine.

Dustin Gress is Senior Advisor for Medical Physics at the American College of Radiology (ACR) in Reston, VA. Prior to the ACR, Mr. Gress served over six years in the Department of Imaging Physics at University of Texas MD Anderson Cancer Center (UTMDACC) in Houston, TX, where he provided clinical medical physics support to interventional radiology, nuclear medicine, CT, and other areas. Mr. Gress began his career at Upstate Medical Physics (UMP), a consulting firm based in Western New York State, where he provided medical physics services to wide range of clients: rural imaging clinics, community hospitals and health systems, and large academic hospitals.

Mr. Gress has served in leadership of two different CAMPEP-Accredited Residency Programs in Imaging Physics; as Associate Program Director at UMP, and as Clinical Coordinator and a Steering Committee member at UTMDACC. He also was an instructor for various Medical Physics courses in the Graduate School of Biomedical Sciences at UTMDACC. Mr. Gress has a solid record of professional service to the American Association of Physicists in Medicine, the American Registry of Radiologic Technologists, and the ACR.

Madan Rehani is the Director of Global Outreach for Radiation Protection at the Massachusetts General Hospital, Harvard Medical School and Adjunct Professor in Medical Physics & Radiology at Duke University, USA. President, International Organization for Medical Physics (IOMP). Formerly, Radiation Safety Specialist at the International Atomic Energy Agency for 11 years and prior to that Professor and Head of Medical Physics at the All India Institute of Medical Sciences, New Delhi, India. Member, International Commission on Radiological Protection, Senior Editor Br J Radiology and having over 200 publications.

RADIATION SENSIBILITIES

Radiation Sensibilities is a regular column in JACR sponsored by the leadership of the Image Gently® and Image Wisely® initiatives that rotates among selected authors selected. The goal of this column is to provide information relevant to optimizing the amount of ionizing radiation used in high-quality medical imaging for both pediatric patients and adult patients. Columns address not only techniques and tactics, but broader issues in the informed use of ionizing radiation in high-quality medical imaging consistent with the missions of Image Gently® and Image Wisely®. Please be sure to check out the current column as well as past month’s columns, and keep a look-out for future monthly installments of Radiation Sensibilities. We hope you find them informative and useful.

Experience is “More Than Meets the Eye” by Madan Rehani
Vol. 14, Issue 12: “Reconsidering the Value of Gonadal Shielding During Abdominal/Pelvic Radiography” by Keith Strauss, Eric Gingold, and Don Frush
Vol. 14, Issue 7: “Image Gently: A Decade of International Collaborations to Promote Appropriate Imaging for Children” by Kimberly Applegate and Don Frush

Follow us: 
The Image Gently® Alliance is a coalition of health care organizations dedicated to providing safe, high quality pediatric imaging worldwide. The primary objective of the Alliance is to raise awareness in the imaging community of the need to adjust radiation dose when imaging children. The ultimate goal of the Alliance is to change practice.

The organization has developed a transformative group of campaigns to address digital radiography, fluoroscopy, interventional radiology, nuclear medicine, computed tomography, dentistry, cardiac imaging and imaging in the setting of minor head trauma.

Image Gently®, the first in a now world-wide network of campaign partners, has become a recognized presence at both national and international venues.

One size does not fit all....