

Final Report on the:

2021 Virtual MEFOMP Medical Physics Conference

Middle East Federation of Organizations of Medical Physics (MEFOMP) in cooperation with the International Atomic Energy Agency (IAEA) organized the "**2021 Virtual MEFOMP Medical Physics Conference**" that took place between 5 and 7 April 2021.

The conference aimed to provide professionals and scientists with an in-depth view of future directions, innovations and techniques in the field, overview on latest advances in medical imaging and radiation therapy, artificial intelligence in medical imaging, updates on radionuclide therapy and dosimetry and to discuss lessons learned from the COVID-19 pandemic. Twenty international leading experts in the field and six speakers from MEFOMP region participated in the conference.

Endorsements and Accreditations:

The conference was endorsed by leading international medical physics organizations, namely: the International Organization for Medical Physics (IOMP), Asia-Oceania Federation of Organizations for Medical Physics (AFOMP), European Federation of Organizations for Medical Physics (EFOMP) and Federation of African Medical Physics Organizations (FAMPO). In addition, the conference was accredited with continuous medical education credits for 15 IOMP CPD points & 16 CAMPEP MPCEC.

The conference organizing committee was honored to invite experts and pioneers in various medical physics related fields to deliver lectures virtually, through live or recorded presentations and to participate in the live discussions and MCQs.

At the end of each lecture, Multiple Choice Questions (MCQs) were presented for the purpose of: (1) to make sure that the participants attended the sessions; (2) for active interaction between participants and the presenter; (3) for the participants to obtain credits from attending the lecture.

Review sessions for recently published medical physics books by their authors took place during the conference.

Registration and Attendance:

The conference had an outstanding registration record with more than 2900 participants while those who attended were over 1900 from 81 countries. The participants who fulfilled the accreditation criteria (answered 50% of the MCQ questions appeared at the end of each lecture) and got the certificate were about 500 participants from 48 countries. This indicates MEFOMP great success in bringing together medical physics and health professionals from the region and across the globe.



Fig. 1. Group photo taken at the virtual conference

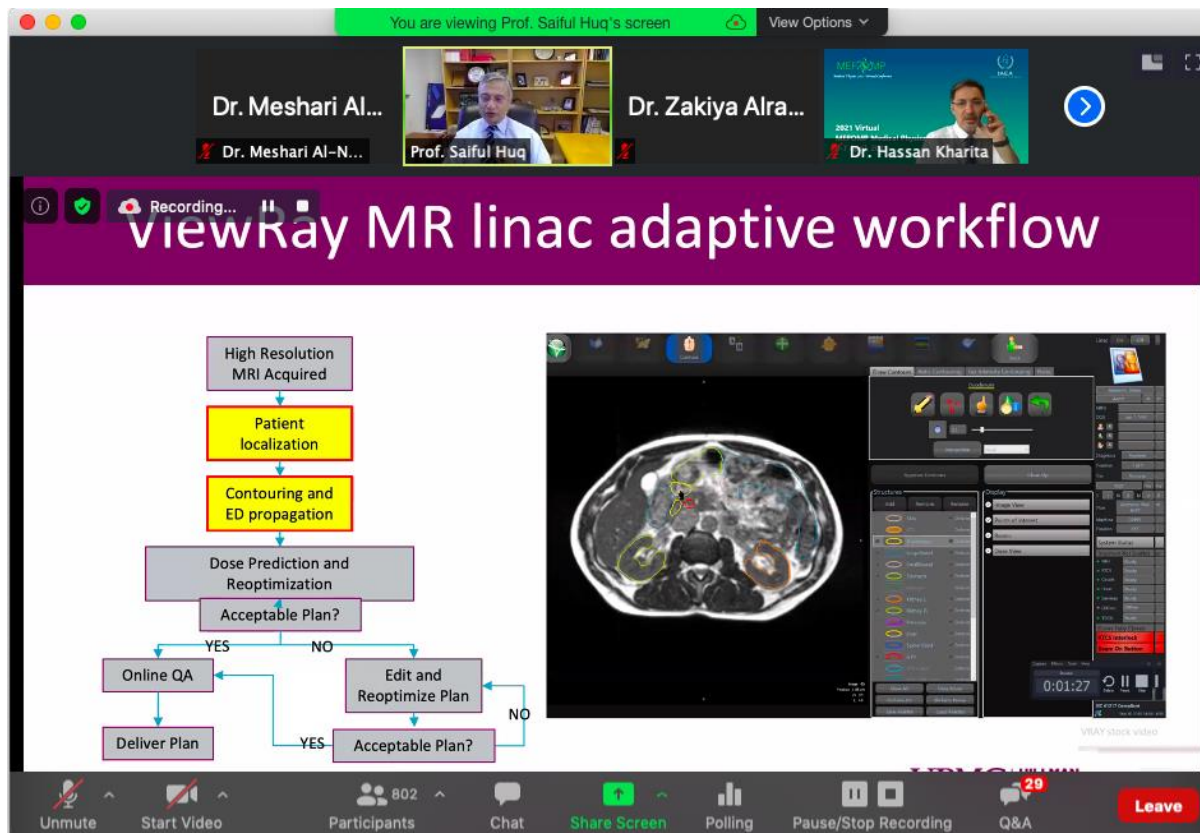


Fig. 2. One of the presentations during the virtual conference

Main Topics:

The conference highlighted topics in different fields of medical physics including Medical Imaging, Radiation Protection, and Therapy in addition to the current and future directions in this field including Artificial Intelligence, particle therapy, and others.

As we are still at the era of our fight against COVID, the conference further highlighted topics related to the pandemic and its impact in medical sector especially the management and roles of Medical Physics in this crisis.

Sponsors:

This conference was sponsored by the following organizations:

- **The platinum sponsors:**
 - Kuwait Foundation for the Advancement of Sciences (KFAS) - Kuwait
 - Hamad Medical Corporation (HMC) - Qatar
- **The gold sponsors**
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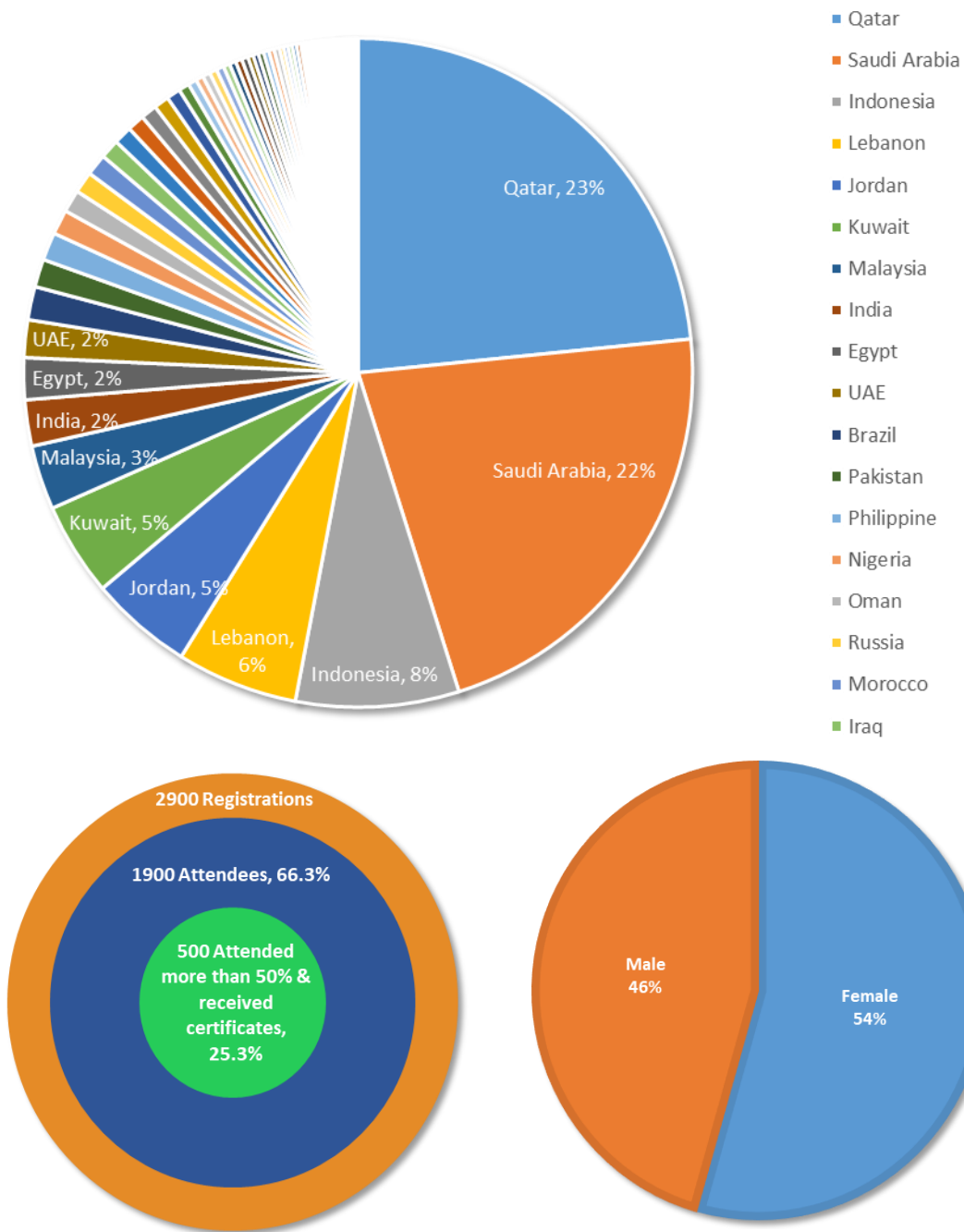


Fig. 3. The virtual conference participants

Conference Certificates:

For authentication purposes all certificates issued in relation to this conference are provided with QR code link to a webpage on www.mefomp.com that contains all lists of:

1. Members of Organizing and Program Committee awarded Appreciation Certificates
2. Names of Speakers awarded Appreciation Certificates
3. Names of sponsor awarded Certificate of appreciation for Platinum, Gold and Silver Sponsors
4. Names of Session Chairs awarded Appreciation Certificates
5. Names Participants who were awarded Participation Certificate

Website and Platform:

A special dedicated website was designed and developed to manage the conference <https://mefomp-conference.com/> and provide all the needed information, about the conference and its committees, program, speakers, partners, sponsors, registration, etc. Zoom Webinar was used as the virtual platform to host this important event and manage all meetings, recording of lectures, managing MCQs, Q&A, etc.

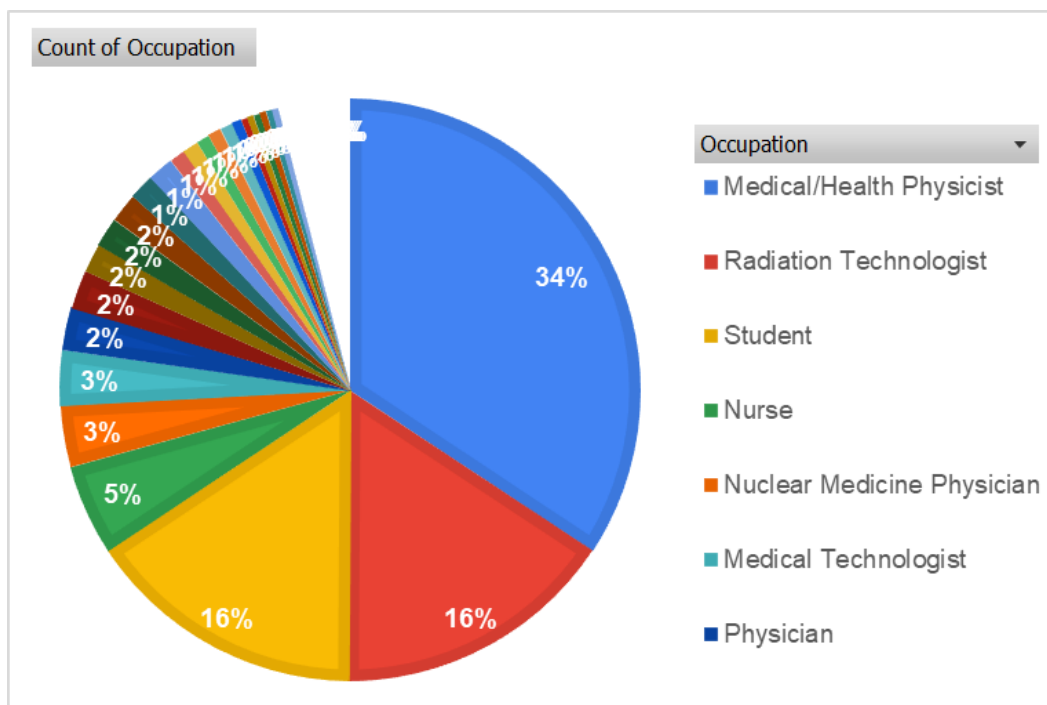
The conference poster (Appendix 1), program (Appendix 2), sponsors and endorsers (Appendix 3), website (Appendix 4) and Sample certificate (Appendix 5). All recording for the conference presentations are available on MEFOMP website: www.mefomp.com.

Analysis of the survey results

A survey was sent to the participants of the conference and below are the analysis of the results of the feedback from of about 600 participants who answered the questions of the survey:

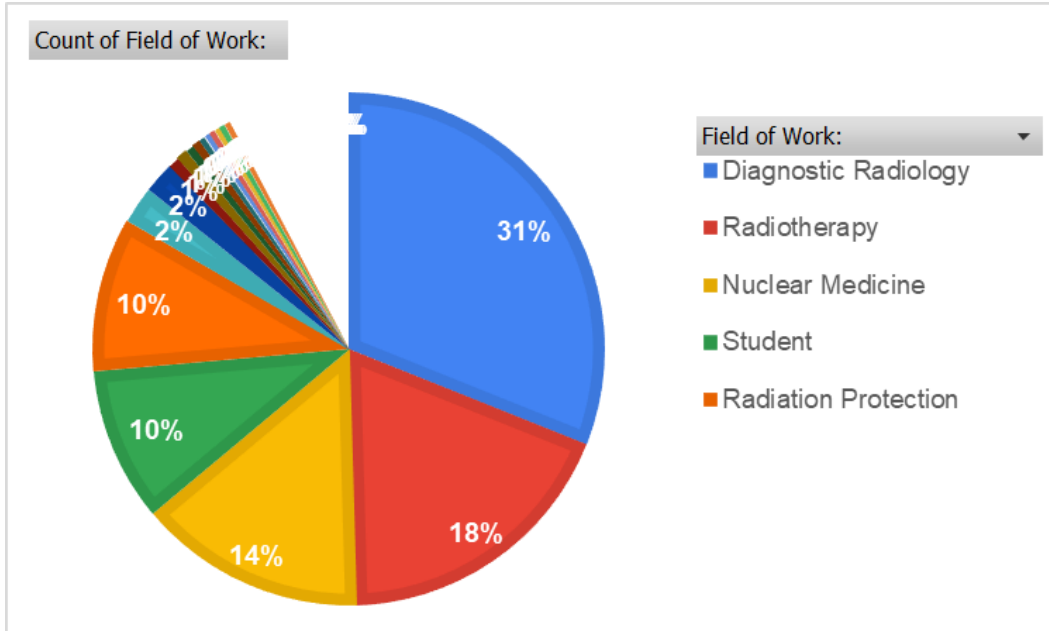
1. *What is your occupation?*

The largest five groups of participants were medical/health physicists, radiation technologists, students, nurses, Nuclear Medicine physicians, medical technologists and physicians with 34%, 16%, 16%, 5%, 3%, 3% and 2%, respectively.



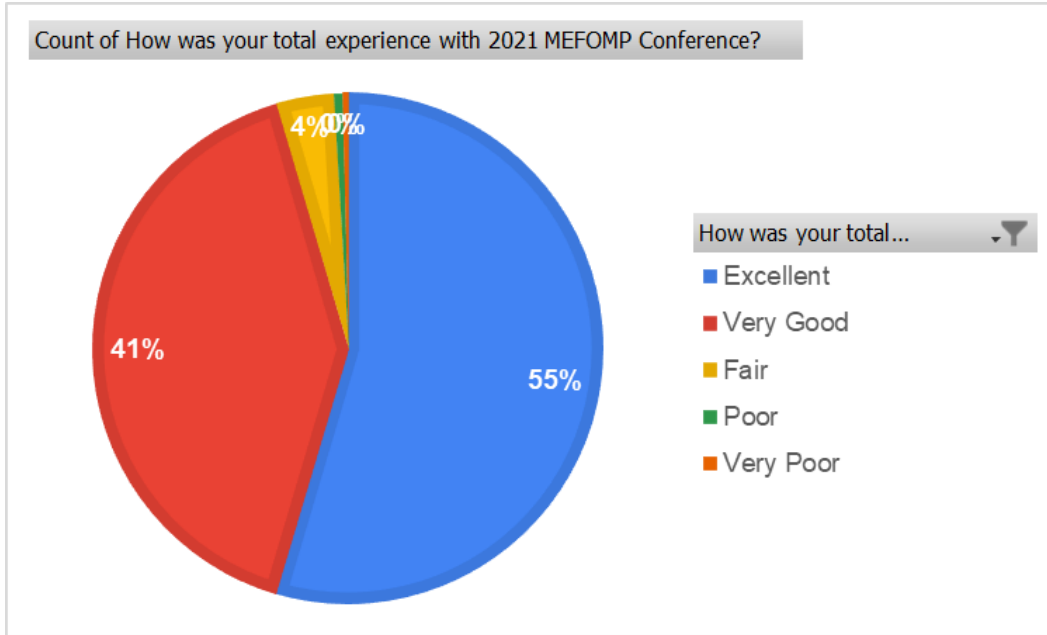
2. What is your field of work?

The largest five groups of participants were working in diagnostic radiology, Radiotherapy, Nuclear Medicine, Students and Radiation Protection with 31%, 18%, 14%, 10% and 10%, respectively.



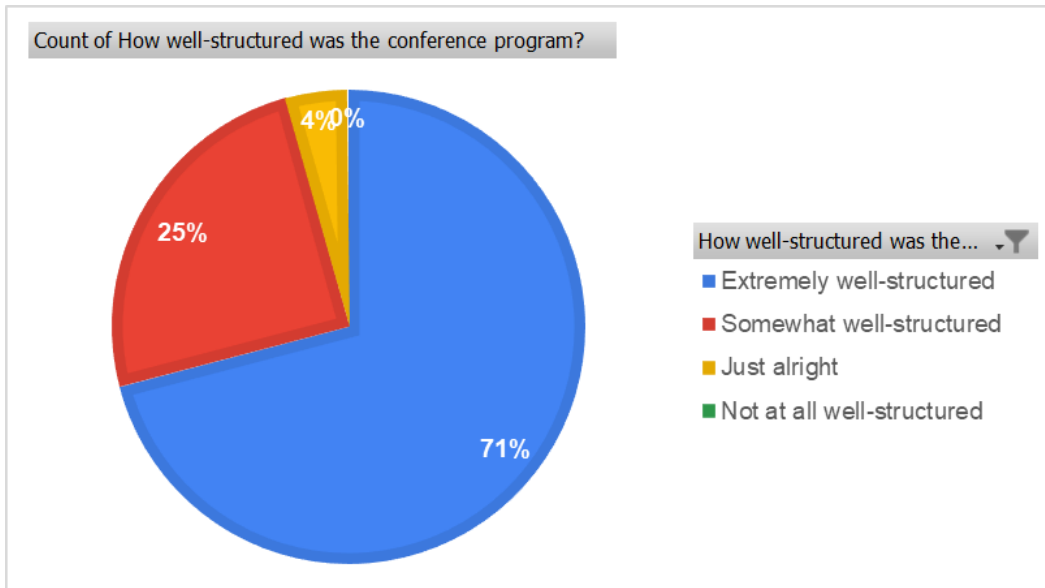
3. How was your total experience with 2021 MEFOMP Conference?

“Excellent” or “Very Good” accounted for 96% of the responses.



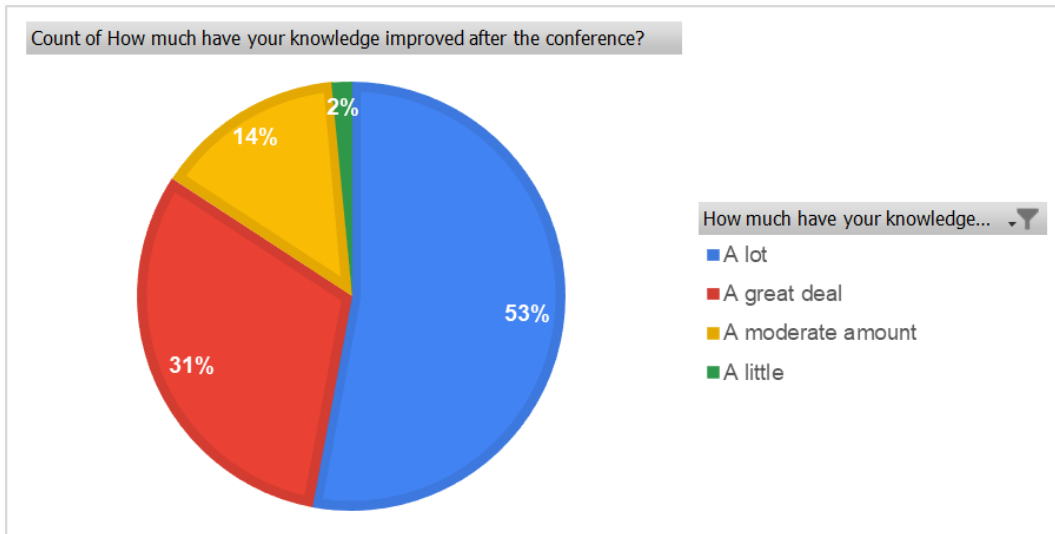
4. How well-structured was the conference program?

Over 96% answered “extremely well- structured” or “somewhat well-structured”.



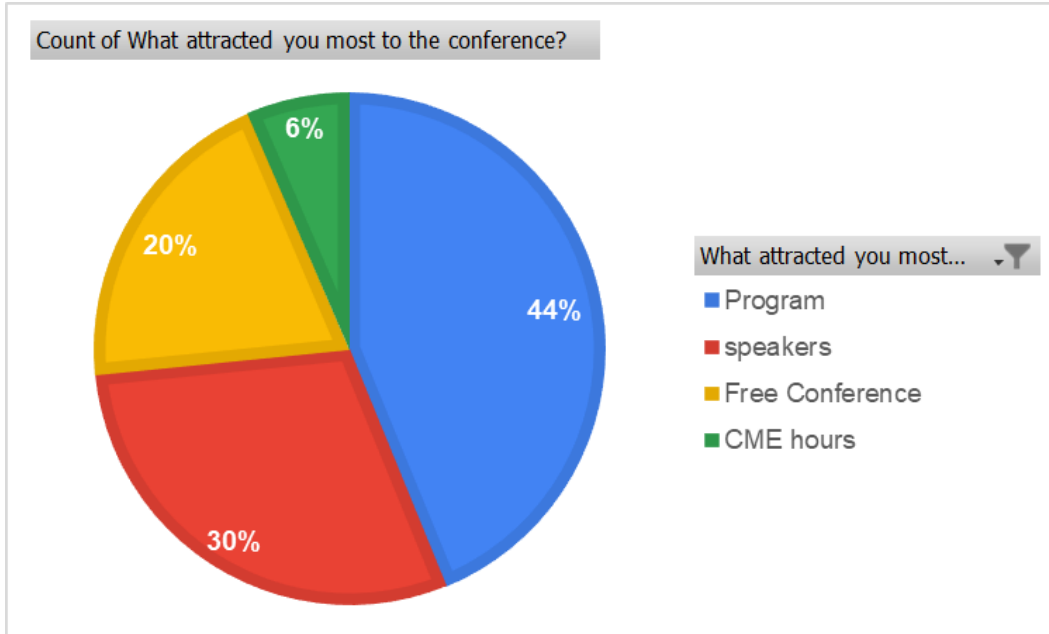
5. How much have your knowledge improved after the conference?

Overwhelming positive response over 84% replied “A lot” or “A great deal”.



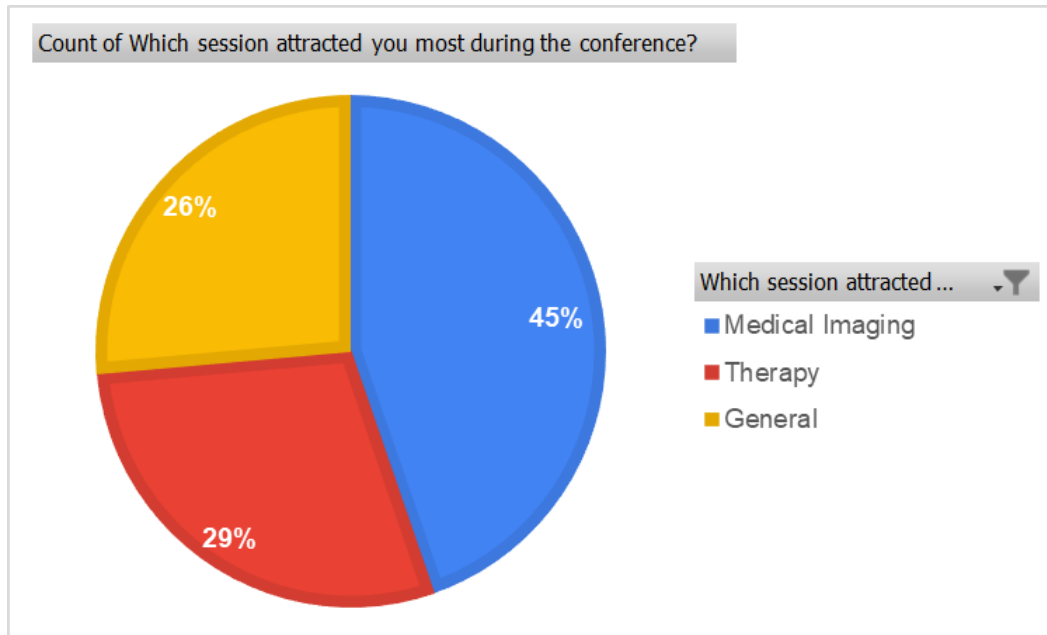
6. What attracted you most to the conference?

44% said they were attracted to the conference because of the program, 30% for the speakers and 20% for the free conference whereas only 6% for the CME or CPD points.



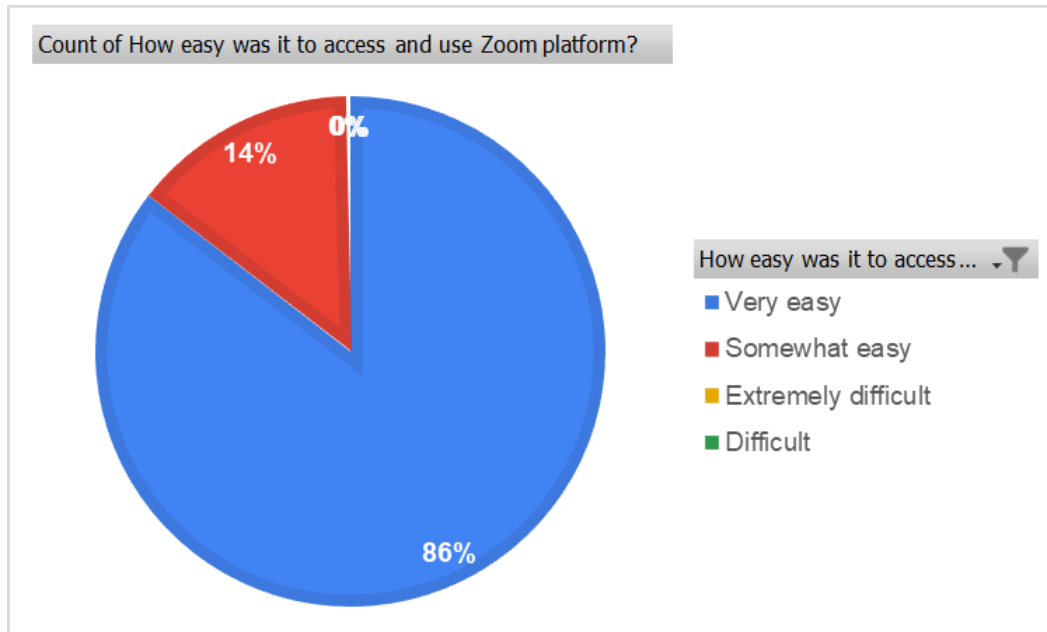
7. Which session attracted you most during the conference?

The answers were 45% for medical imaging, 29% for therapy and 26% for the general sessions.



8. How easy was it to access and use Zoom platform?

All responders said to access the Zoom was “very easy” or “somewhat easy”.



Appendix 1. The virtual conference poster



Middle East Federation of Organizations of Medical Physics



IAEA
International Atomic Energy Agency
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KFAS
مؤسسة الكويت للتقدم العلمي
Kuwait Foundation for the Advancement of Sciences

MEFOMP in cooperation with the IAEA organize the **2021 Virtual MEFOMP Medical Physics Conference**

📅 5 - 7 April, 2021 ⌚ 10:00 AM (Kuwait Time / GMT+3) 📄 Free registration

Organizing Committee & Local Speakers

					
Meshari Al-Nuaimi, PhD MEFOMP Vice President	Abdalla Al-Haj, PhD MEFOMP Past President	Refaat Al-Mazrou, MSc MEFOMP EST Committee Chair	Huda Al-Naemi, PhD MEFOMP President	Rabih Hammoud, PhD MEFOMP Treasurer	M. Hassan Kharita, PhD MEFOMP Secretary General

International Speakers

Main Topics

- Diagnostic Medical Imaging
- Nuclear Medicine and PET Imaging
- Artificial Intelligence in Medical Imaging
- Radiation Therapy
- Radiation Detection
- Radiation Protection
- Radionuclide Therapy
- Dosimetry & Quality Assurance

Accreditation




15 CPD Points 16 MPCEC

				
Ishmail Badr, PhD London, UK	Dale Bailey, PhD Sydney, Australia	Sabine Bernard, MSc Brussels, Belgium	David Bradley, PhD London, UK	Arun Chougule, PhD AFOMP President
				
John Damilakis, PhD IOMP Vice President	Yaser Gholami, PhD Sydney, Australia	Antonis Kalemis, PhD Erlangen, Germany	Tomas Kron, PhD Melbourne, Australia	Nuriye O. Kucuk, MD Ankara, Turkey
				
Ms. Giorgia Loreti IAEA	Osama Mawlawi, PhD Houston, USA	Daniel A. Mazal, PhD Madrid, Spain	Cem Onal, PhD Adana, Turkey	M. Saiful Huq, PhD AAPM Chair of the Board
				
Mr. S. Somanesan Singapore	Lucie Sukupova, PhD EFOMP Member	Filip Vanhavere, PhD Mol, Belgium	Jenia Vassileva, PhD IAEA	Kathy Willowson, PhD Sydney, Australia






www.mefomp-conference.com



Appendix 2. The virtual conference program



Day 1: Monday 5th April, 2021

Session	Time (GMT +3)	Speaker	Title of Presentation
General 10:00 – 12:00	Session Chair: Dr. Jamila Alswaidi -- Emirates Medical Physics Society		
	10:00 - 10:05	Dr. Meshari Al-Nuaimi	Opening & Welcoming Notes
	10:05 - 10:30	Dr. Huda Al-Naemi	Medical Physics in the Middle East: Current Status
	10:30 - 11:00	Prof. David Bradley	Current and future direction of Radiation Physics in Medicine
	11:00 - 11:30	Ms. Giorgia Loreti	IAEA Support to the Medical Physics Profession
	11:30 - 11:50	Questions and Answers / Break	
Medical Imaging 12:00 – 14:00	Session Chair: Dr. Salem Abu Musleh -- Palestine Medical Physics Society		
	12:00 - 12:30	Dr. Dale Bailey	RetroSPECT: Gallium-67 as a Theranostic Imaging Agent
	12:30 - 13:00	Prof. Osama Mawlawi	Recent Advances in PET/CT and PET/MR Designs
	13:00 - 13:30	Mr. Refaat AlMazrou	NEMA Acceptance Testing Procedures of PET Scanners
	13:30 - 14:00	Questions and Answers / Break	
Therapy 14:00 – 16:40	Session Chair: Dr. Zakiya Alrahbi -- Oman Medical Physics Society		
	14:00 - 14:30	Prof. Saiful Huq	Novel Radiotherapy Technologies
	14:30 - 15:00	Dr. Tomas Kron	Dose Calculations in Radiotherapy
	15:00 - 15:30	Dr. Rabih Hammoud	Recent Advances in SGRT
	15:30 - 16:00	Prof. Cem Onal	MRI-Guided Radiotherapy
	16:00 - 16:30	Prof. David Bradley	The Development of High Resolution, Carbon and Glass Dosimetry Systems for Use in Radiotherapy Regimes
	16:30 - 16:40	Questions and Answers and Closing of the Day	

Day 2: Tuesday 6th April, 2021

Session	Time (GMT +3)	Speaker	Title of Presentation
General 10:00 – 12:00	Session Chair: Dr. Ahmed Subahi -- Saudi Medical Physics Society		
	10:00 - 10:30	Dr. Filip Vanhavere	How to Run Effective Technical Services During COVID-19 Pandemic
	10:30 - 11:00	Dr. Meshari Al-Nuaimi	Radiation Protection and Dosimetry of Eye Lens
	11:00 - 11:30	Dr. Jenia Vassileva	Radiation Protection of Patients: Current Challenges and Actions
	11:30 - 11:50	Questions and Answers / Break	
Therapy 12:00 – 14:00	Session Chair: Dr. Khabbab Almohammed -- Yemen Medical physics society		
	12:00 - 12:30	Dr. Tomas Kron	Size Matters: Radiotherapy for Paediatric and Bariatric Patients
	12:30 - 13:00	Dr. Kathy Willowson	Towards Personalized Dosimetry in Liver SIRT
	13:00 - 13:30	Dr. Daniel A. Mazal	Latest Advancement in Proton Therapy
	13:30 - 14:00	Questions and Answers / Break	
Medical Imaging 14:00 – 16:40	Session Chair: Mr. Nabil Iqeillan -- Jordan Medical Physics Society		
	14:00 - 14:30	Dr. Abdullah Al-Haj	Establishments of Diagnostic Reference Levels in the Middle East
	14:30 - 15:00	Prof. John Damilakis	Artificial Intelligence in Medical Imaging: Challenges and Opportunities
	15:00 - 15:30	Dr. Lucie Sukupova	Angiographic and Fluoroscopic Systems-QC Protocol
	15:30 - 16:00	Mr. Somanesan	Radiation Safety in Radioembolization with Y90 for Hepatic Carcinoma and Use of Y-90 PET
	16:00 - 16:30	Prof. Nuriye Kucuk	PETMR in Clinical Practice
16:30 - 16:40	Questions and Answers and Closing of the Day		

Day 3: Wednesday 7th April, 2021

Session	Time (GMT +3)	Speaker	Title of Presentation
Session 1: General 10:00 – 12:00	Session Chair: Dr. Christoph Trauernicht – Federation of African Medical Physics Organizations (FAMPO)		
	10:00 - 10:30	Dr. Hassan Kharita	Contribution of Medical Physicists During COVID-19 in the Middle East
	10:30 - 11:00	Mr. Somanesan	Global and Local Impact of COVID-19 on Nuclear Medicine & Radiology Departments - A Local Hospital Response
	11:00 - 11:30	Dr. Filip Vanhavere	New Developments in Personal Dosimetry
	11:30 - 11:50	Questions and Answers / Break	
	11:50 - 12:00	Dr. Hassan Kharita	Book Presentation: Quality Control procedures for Diagnostic X-Ray Equipment
Session 2: Medical Imaging 12:00 – 14:00	Session Chair: Dr. Nabaa Naji – Iraq Medical Physics Society		
	12:00 - 12:30	Dr. Ishmail Badr	Digital Breast Tomosynthesis including Synthetic 2D Imaging
	12:30 - 13:00	Dr. Yaser Gholami	Update on Radiobiology of Radionuclides
	13:00 - 13:30	Prof. John Damilakis	Precise CT Dosimetry in Diagnosis and Radiotherapy: Why it Matters?
	13:30 - 14:00	Questions and Answers / Break	
Session 3: Therapy 14:00 – 17:05	Session Chair: Dr. Zeina Kattar -- Lebanon Medical Physics Society		
	14:00 - 14:30	Dr. Kathy Willowson	Updates on Radionuclide Therapy and Dosimetry
	14:30 - 15:15	Prof. Saiful Huq	Small Field Dosimetry: An Overview of the Recommendations of IAEA-AAPM
	15:15 - 15:45	Prof. Arun Chougule	Radiobiology from Radium to Particle Therapy
	15:45 - 16:15	Ms. Sabine Bernard	Ethos Therapy, an Adaptive Intelligence Solution
	16:15 - 16:45	Dr. Antonis Kalemis	Latest Developments in Quantitative SPECT/CT
	16:45 - 16:55	Questions and Answers	
	16:55 - 17:05	Dr. Meshari Al-Nuaimi	Conference Closing Remarks

Appendix 3. The virtual conference sponsors and endorsers (partners)

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Platinum




Gold






Silver






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Appendix 4. The virtual conference website <https://mefomp-conference.com/>



Fig. 8 2021 MEFOMP Virtual Conference Certificates

