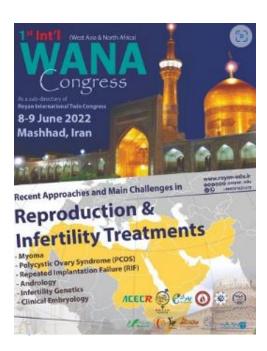


A Report on the 1st International West Asia and North Africa (WANA) Congress on Main Reproductive Challenges

The Royan Institute, affiliated with the Academic Center for Education, Culture, and Research (ACECR), Iran, was established by Dr. Saeed Kazemi Ashtiani. The Royan Twin Congress came into existence by Dr. Kazemi and his colleagues to gather scientists worldwide to actively share and exchange scientific knowledge and experiences with renowned scientific centers, universities, and scientists. Following the remarkable achievements of the Royan Twin Congresses, the WANA (West Asia & North Africa) congress held by WANA Scientific Network (WSN) was created as a subdirectory of the Royan Twin Congress. Scientists from WANA regions, under the umbrella of multilateral effort and scientific collaboration, which included about 25 countries, came together to share their knowledge at the 1st International WANA Congress, with the topic of "Considering the Recent Approaches and Main Challenges in Reproduction and Infertility Treatments". The first round of the congress was held with the contribution of Royan researchers forming the executive and scientific board of the congress on Wednesday and Thursday, 8-9 June 2022, in the Holy City of Mashhad, Iran. The target audiences who participated in this event included physicians, scientists, specialists, and undergraduate and post-graduate students involved or interested in the urology, gynecology, reproductive radiology, genetics, embryology, reproductive health, midwifery, epidemiology, laboratory sciences, reproductive biology, and developmental biology fields.

As a result of the COVID-19 pandemic, whole scientific events are held through virtual environments, and that is why we launched the 1st International WANA Congress as a hybrid one to cover all specialists in many regions and remote parts of WANA who couldn't make a trip and presence in the venue of the congress.



Pre-congress workshops were held before the 1st WANA congress. Two basic pre-congress workshops: "Oocyte and Embryo from IVM to Cryopreservation" (chairperson: Dr. Fatemeh Hasani) and "Cell Culture" (chairperson: Dr. Azam Dalman) were held for the students and researchers. The workshop on "Embryo Cloning" (chairperson: Dr. Mehdi Hajian) was held as an interesting post-congress training course. Further, two advanced clinical workshops were performed by expert gynecologists and radiologists entitled "Ovarian Follicular Monitoring in Infertile Women (chairperson: Dr. Firouzeh Ahmadi) and "Uterine Abnormalities: Diagnostic Methods, Complications and Treatments" (chairperson: Dr. Mehri Mashayekhi) in collaboration with Mashhad University of Medical Sciences.

Besides this event, two specific workshops were launched for Iranian teachers and educators in cooperation with the Iran Ministry of Education and were broadcast simultaneously on the "Shad System" as an educational virtual network for all our honorable teachers nationwide. Two pioneers in the fields of embryology, reproduction, and stem cells delivered lectures in these workshops. Professor Hossein Baharvand, the stem cells science innovator in Iran and head of the stem cell research center of Royan Institute, had a talk entitled "Lessons from Stem Cells" on 7 June 2022. Also, Professor Mohammad Hossein Nasr-Esfahani, head of the Biotechnology Research Center of Royan Institute, the creator of the first Iranian cloned sheep named Royana, had a lecture entitled "Reproduction in the Current Time" on 8 June 2022.



Pre-congress workshops and training courses besides the 1st International WANA Congress.

The main scientific themes of the 1st WANA Congress were categorized into six sessions, including Polycystic Ovarian Syndrome (PCOS), Andrology, Repeated Implantation Failure (RIF), Uterine Myoma, Clinical Embryology, and Reproductive Genetics.

The opening ceremony of the 1st WANA Congress was run by Professor Mahnaz Ashrafi, the scientific chairperson of the congress, Dr. Dehghani Firouzabadi, the president of ACECR, Dr. Seyed Jaffar Hussain, the WHO country representative and head of mission, Dr. Abdolhossein Shahverdi, the president of Royan Institute, and Dr. Hamid Reza Bidkhori, the chancellor of ACECR in Khorasan Razavi.



Opening ceremony of the 1st International WANA Congress.

The first scientific session was "Polycystic Ovarian Syndrome (PCOS)" with Professor Mahnaz Ashrafi and Professor Ashraf Moini as the chairpersons. The first speaker was Dr. Maha Al Khaduri from the Department of Obstetrics and Gynecology, Sultan Qaboos University, Oman. The title of her lecture was "Polycystic Ovary Syndrome Candidates' Genes". The second speaker, Professor Nusrat Shah Kamal, a gynecologist and pro vice chancellor from Dow University of Health Sciences, Pakistan, delivered a lecture entitled "Polycystic Ovarian Syndrome: Changing the Lifestyle". The last speaker in this session who joined the congress virtually was Professor Abbas Aflatoonian, a gynecologist from the Department of Obstetrics and Gynecology, Research and Clinical Center for Infertility, Yazd Reproductive Sciences Institute, Shahid Sadoughi University of Medical Sciences, Iran. His lecture was "PCOS and Assisted Reproduction Techniques (ART)".

The second session focused on "Andrology" with Professor Mohammad Hossein Nasr-Esfahani, an embryologist and andrologist, and Professor Mohammad Ali Sadighi Gilani, a urologist, both from Iran, as chairpersons. Dr. Serajoddin Vahidi, an Iranian andrologist from Andrology Research Center, Yazd Reproductive Science Institute, Shahid Sadoughi University of Medical Sciences, Iran was the first invited speaker who gave a lecture on "Tips and Tricks in Microscopic Varicocelectomy". The next speaker was Dr. Salem Shalaweh, an embryologist from the Embryology Department, Noor Al-Hayat Fertility Center, Libya, who delivered a lecture regarding "Use of The Nanoparticles to Improve The Quality of Human Semen for Capacitation and Reduce DNA Fragmentation". Next, Professor Mohamed Arafa, an andrologist from Department of Andrology, Cairo University Medical School (Kasr AlAiny), Egypt, virtually gave a speech on "Using Testicular Sperm in ICSI in Cases of High Sperm DNA Fragmentation". Afterwards, Dr. Saaduldeen Gali, a urologist and head of the Urology Department, College of Medicine, University of Kufe, Iraq, talked virtually about "Azoospermia".



The scientific sessions of the first day of the 1st International WANA Congress.

The last scientific panel on the first day of the congress, 8 June, focused on "Repeated Implantation Failure (RIF)" with Dr. Reza Aflatoonian and Dr. Maryam Hafezi as chairpersons. This session was enriched by three notable gynecologists from Syria, Pakistan, and Iran. Professor Marwan Alhalabi, head of the Embryology, Genetics and Reproductive Medicine Department, Medicine Faculty, Damascus University, Syria, talked virtually about "Evidence-based Management of Recurrent Implantation Failure and Exploring Knowledge". Professor Nazli Hossain, head of the Department of Obstetrics and Gynecology Unit-III, Dow University of Health Sciences, Pakistan, talked about "Attitude and Perception of Women with Recurrent Pregnancy Loss". Professor Hamid Gourabi, head of Genetics Department, Reproductive Biomedicine Research Center, Royan Institute for Reproductive Biomedicine, Iran, spoke about "PGT-A Efficiency in Increasing ART Success". Mashhad religious and historical spots, such as the Emam Reza Holy Shrine, were visited after the end of the first day's scientific sessions.

On the second day of the congress, the first session started about "Uterine Myoma" with Dr. Firouzeh Gaffari, a gynecologist from Iran, as the chairperson. Professor Saghar Salehpour from Department of Obstetrics and Gynecology, Preventative Research Center, Shahid Beheshti University of Medical Sciences, Iran, had a talk entitled "Uterine Myoma Mapping Before Surgery". Dr. Malihe Mahmoudinia from Obstetrics and Gynecology Department, Faculty of Medicine and the Maternal and Neonatal Research Center, Mashhad University of Medical Sciences, Iran, talked about the "Effect of Uterine Myoma and Myomectomy on Assisted Reproductive Technology Outcome". Dr. Mete Isikoglu, a specialist in obstetrics and gynecology and a consultant IVF practitioner, from Gelecek IVF Center, Turkey, was the last speaker in this session talking on "Intramural Myomas and Infertility".

Through the second session, Dr. Poopak Eftekhari Yazdi and Dr. Fatmeh Hassani, embryologists from Iran, started the "Clinical Embryology" session as the chairpersons. Dr. Ahmad Alrahel, a Syrian embryologist, talked about "Sperm DNA Fragmentation and Its Impact on IVF Outcome". Dr. Faten Talal Al-khayyat, a gynecologist from Oman presented her talk virtually about "Oocyte and Embryo Scoring Using Artificial Intelligence to Optimize IVF Outcome". Dr. Abdulaziz Belhaj, an embryologist from the Embryology Department, Noor Al-Hayat Fertility Center, Libya was the next speaker, lecturing on "In Vitro Fertilization Outcome in ICSI Cycle After Human Sperm Preparation by Deferent Method and Which One Less Stressful". Dr. Mahshid Bazrafkan from Reproductive Biotechnology Research Center, Avicenna Research Institute, Iran, delivered a lecture entitled, "To ICSI or Not to ICSI: How to Maximize Success Rate?"

The last session focused on 'Reproductive Genetics" under the supervision of Professor Hamid Gourabi as the chairperson. Dr. Evrim Unsal from the faculty of medicine at Yuksek Ihtisas University in Turkey presented her lecture about "NGS-based Male and Female Infertility Panels". Professor Hamid Gourabi, head of Genetics Department, Reproductive Biomedicine Research Center, Royan Institute for Reproductive Biomedicine, Iran, talked about "Chromosome Aneuploidy Mosaicism in Human Preimplantation Embryos". Dr. Mohammad Reza Zamanian (joined virtually) and Dr. Seyed Navid Almadani from Genetics Department, Reproductive Biomedicine Research Center, Royan Institute for Reproductive Biomedicine, Iran, presented their lectures on "Genetic Etiologies in Male Infertility" and "High-risk Pregnancy from A Genetic View".







Acknowledgment of the invited speakers and scientific chairpersons during visiting the Razavi Hospital at the 1st WANA International Congress.

By the end of all scientific programs on the second day of the congress, there was the closing ceremony launching the WANA Scientific Network declaration ceremony. The Membership Cards of the WANA Scientific Network were allocated among invited speakers and participants during the closing ceremony. In addition, all national and international invited speakers were appreciated for receiving their certificates and symbols of the WANA Congress and visiting the biggest infertility hospital in Mashhad, Razavi Hospital. Finally, a memorable picture was taken.



The memorial picture at the closing ceremony.

The most important part of the declaration in every congress is the advertisement. Hence, our colleagues in the virtual section worked seriously in this way for the 1st international WANA congress, as listed below: Mr. Mehdi Zarbakhsh and Mr. Mohammad Sadegh Lotfi designed the posters and advertisement sheets, Mr. Yasin Shakeri and Miss. Pegah Shayegh gave the announcement on Instagram, Twitter, WhatsApp, and Rubika. Our data reveals that the rates of observed posts on Instagram were about 2800, and the view stands were at 3500. Also, the total transferred messages, including questions and answers, were over 250.

The point to be considered here is that the WANA congress would not have been run in the lack of significant contribution made by the spiritual and financial assistance of Ministry of Education, ACECR of Khorasan Razavi Province, Tehran Governor's Office, Governors Health Tourism Development Center of Islamic Countries, General Administration of Education of Khorasan Razavi Province, Khorasan Razavi Red Crescent, Astan Quds Razavi, and Razavi Hospital. Royan Stem Cell Technology and Behrad Royesh Royan companies were the financial Diamond sponsors of this event.



Lastly, we would like to state special thanks to our colleagues whose presence was of great support in launching this round of congress and also appreciate Royan Board Members who have played key roles throughout all procedures.



Executive committee of the 1st International WANA Congress.



Sponsors of the 1st International WANA Congress.



Behrad Royesh Royan Co. as the Gold sponsor of the congress.