







## Report on International Webinar on: "Contribution of Women Scientists during CORONA Pandemic"

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The rapid spread of COVID-19 across 213 countries as of 24 July 2020 reveal how COVID-19 pandemic had impacted our social, economic, mental, educational, and professional life. Currently, researchers around the globe are probing into new vaccines, medicine, accurate, and faster detection technology; making safety tools for general and frontline workers etc. Even though both men and women are engaged in these activities, the level of involvement may vary. The way women are being affected and implicated due to Covid-19 pandemic is far more different, complicated and challenging than men putting in the similar situation. Again, it is far different in case of women or girls at home than frontline healthcare personnel fighting Covid-19. In general, women are more occupied in household work and less likely are engaged in any academic or professional activities such as writing papers, doing laboratory work, etc. This webinar aimed to highlight the contribution of women professionals from home and abroad who came forward to overcome these obstacles.

"Contribution of Women Scientists during CORONA Pandemic", an International Webinar was held on 24 July at 11:15 am - 12:45 pm, GMT with around 70 participants. This webinar was jointly organized by the International Organization for Medical Physics Women Group (IOMP-W), The Organization for Women in Science for the Developing World (OWSD), Bangladesh National Chapter, Department of Medical Physics and Biomedical Engineering (MPBME), Gono Bishwabidyalay (University), Dhaka; Innovation Hub (iHub), Gono Bishwabidyalay (University), Savar, Bangladesh.

This webinar was conceptualized to engage and, incentivize the role of women scientists for their contributions during the COVID-19 pandemic. The organizers have invited four eminent women speakers from the field of medical physics, bioinformatics and veterinary science.

**Dr Tabassum Mumtaz**, Secretary, OWSD Bangladesh National Chapter, OWSD-Elsevier Foundation Awardee 2019, Principal Scientific Officer, and Bangladesh Atomic Energy Commission (BEAC) coordinated the webinar. She began the webinar by introducing herself and the background of each organizer. She welcomed all participants and the main program was commenced after presenting a short biography of the first speaker, **Assoc. Prof. Dr. Chai Hong Yeong.** 

**Dr Chai** is an Associate Professor at the School of Medicine, Taylor's University, Malaysia. She is also the Chair of Professional Relations Committee; Asia-Oceania Federation of Organizations for Medical Physics (AFOMP); Vice President of the, South-East Asia Federation of Organizations for Medical Physics (SEAFOMP); Web Sub-Committee (Newsletter) of the, International Organization for Medical Physics (IOMP); and a Committee Member of the IOMP-W.

Dr. Chai delivered her talk on the topic of "Fighting the Pandemic with Connecting Hearts - Societal Roles led by a Women Medical Physicist". Her presentation demonstrated how innovative approaches can and are already contributing to combat the spread of COVID-19 virus. She discussed on the actions of Movement Control Order (MCO) in Malaysia which was a series of preventive measures implemented by the federal government of









Malaysia since 18 March 2020 in response to the COVID-19 pandemic in the country. She explained how she formed a voluntary team in her university to produce and supply Personal Protection Equipment (PPE) such as face shields, mask straps, "COVID-19 Hijab accessories" to the front liners using state-of-the-art technology such as 3D printing and laser cutting. She also collaborated with a biomedical engineer and a medical physicist in developing an Internet-of-thing (IoT)-based infrared thermometer to help the government in monitoring the hot spots of Chai also demonstrated COVID-19 COVID-19 in the country. Dr a bibliometric (www.covid19bibliometrics.org) developed by her team and in collaboration with Elsevier- Scopus. Finally, Dr Chai She thanked her teammates and acknowledged contribution of her colleagues and students at Taylor's University by showing a video clip at the end of the presentation. It was a learning experience for all and a classic example which can be replicated in other Asian countries as well.

Second speaker of the webinar was also a well-known medical physicist from Bangladesh- <u>Prof Dr Hasin Anupama Azhari</u>, Professor & Chairman, Department of Medical Physics and Biomedical Engineering (MPBME); Director, Innovation Hub (iHub), Gono Bishwabidyalay (University), Savar, Dhaka, Bangladesh; OWSD Alumni, OWSD Executive Board Member, Asia and Pacific Region; Committee Member, IOMP-W; General Secretary, Asia Oceania Federations of Organization for Medical Physics (AFOMP); CEO, South Asia Centre for Medical Physics and Cancer Research (SCMPCR); General Secretary, Alo Bhubon Trust.

In her topic "Pandemic Effects: Reshaping the World" **Prof Dr Hasin Anupama** gave some preliminary facts on virus and bacteria and chronology of pandemics in the past. She also presented a comparative view on the positive and negative impact of CORONA pandemic on us as well as on education, power balance, environment, global cooperation, technological advancement. She highlighted the contribution of MPBME students and how her university has progressed with COVID-19 test kit/gonoshasthaya kit, lab installation, lab safety, HVAC system, maintenance, and quality control, preparing corona a dedicated unit in the hospital, design, oxygen plan, assuagement distribution from Alo Bhubon Trust etc. It was clear from her presentation that medical physicists at Gono Bishwabidyalay have played an important role in fighting CORONA. Being involved with different organizations Dr Anupama with her team has also been able to arrange different webinar programs (AFOMP, SCMPCR) and exchanged awareness information with DGHS, Ministry of Health on COVID 19 and continued working on COVID 19 with group of people on behalf of AFOMP, ALO-BT. Her main message was CORONA is not the end, so people must change their thinking, life style for survivability.

Chair of OWSD Bangladesh National Chapter Dr Sharmin Parveen was the third speaker. She is an Associate Professor and Head of the Department of Health Informatics and Dean, Faculty of Allied Health Sciences of Bangladesh University of Health Sciences (BUHS) - another reputed private university in Bangladesh dealing with health sciences programs. She discussed on "Role of Health Informatics Combating Covid-19 Pandemic and Its Aftermath". Dr. Sharmin highlighted the initiatives taken by her team from the Dept. of Health Informatics to face the challenges of COVID-19 crisis. She shared the current scenario of COVID-19 in Bangladesh with a focus on hospital bed and human resource status in Bangladesh. The short term effects and long term impacts of COVID-19 on healthcare and challenges of providing health service to non-Covid-19 patients were also addressed in her presentation. She emphasized on the importance of telemedicine in obstetrical care as pregnant mother are continuously struggling to get regular visit with doctor and missed routine checkup for consultation. Telemedicine system integrated with Artificial Intelligence (AI), data science, Internet of Things (IoT) and Electronic Medical Record (EMR) can ensure the continuous remote medical care for Reproductive and Child Health (RCH) issues in COVID-19 pandemic situation in Bangladesh with which her team is working on. She also shared how her team is actively involved with research works related to designing Health apps for Outdoor Patient Management, Data management & analytics and electronic medical records to accelerate the digital transformation of healthcare during COVID-19 pandemic. Audience learned a lot and got inspired through her informative presentation.









Apart from the focus on human health management during CORONA pandemic, another important sector to be considered was livestock management.

Last speaker of the webinar <u>Prof Dr Nasrin Sultana Juyena</u> of Department of Surgery and Obstetrics, Faculty of Veterinary Science, Bangladesh Agricultural University, who is also an OWSD Early Career Fellow-2019, covered this area. She talked on "Responding to the Covid-19 Crisis: The Contribution of the Veterinary Profession in Bangladesh". Contribution of Vets in Bangladesh especially in corona testing, livestock in the corona war, corona detective lab, open discussion and counselling livestock farmers during corona pandemic etc. were highlighted by Prof Juyena. She also mentioned a few names from a large number scientific community of veterinarians who worked and struggled hard with their research for solving health challenges of animals due to COVID-19.

All four speakers received appreciation from participants for their effort in relation to CORONA and their presentation motivated audience and encouraged them to involve women scientists.

The webinar was enriched by the active participation of **two internationally renowned Medical Physicist Prof Dr. Kwan Hoog Ng** from Malaysia, **Prof. Golam Abu Zakaria** from Germany. **Their inspirational speech was really increasing and they agreed on the fact that** women scientists can contribute further in all aspects.

**Dr Afsana Ansari**, organizing secretary of OWSD Bangladesh Chapter was in charge for live streaming of this webinar in OWSD Facebook group. Being a rice breeder/scientist, she also shared her own experience and mentioned their break free field research during lockdown which ultimately ensure food security of our country.

Many encouraging words came from participants other than Bangladesh. To mention a few- Assoc Prof. Dr. Wong Eng Hwa from Malaysia, Dr. Tista Prasai Joshi from Nepal, Dr Vijaya Kader from India, Dr Sumi Karki from Pakistan and many more like. Some notable participants were Dr Saira Banu, Dr Jannatul Ferdous, Ms Doris and Ms Qixu.

All speakers shared their thoughts and agreed that the contribution of women in family, society, working place is cannot be ignored and only the conducive environment, mentality, support from family and colleagues will help women scientists to move forward. They also suggested holding the courage and combined efforts will be the key of success. All participants looked forward to this type of program as soon as the situation gets back to normal. At the end of the Program, Ms Nupur Karmaker, Lecturer, Department of Medical Physics and Biomedical Engineering (MPBME), GB and Joint Secretary, OWSDNCBD; Executive Member, iHub delivered vote of thanks. She thanked all the organizers viz. MPBME faculty members, iHub, OWSDNCBD and IOMP-W group Chair, Executive committee members and their colleagues. She thanked Prof. Dr. Magdalena Stoeva: Chair, IOMP-W and Prof. Dr. Madan Rehani, president, IOMP for their cooperation and guidance regarding speaker selection from IOMP. She thanked Dr. Afsana Ansari, Organizing Secretary, OWSDNCBD, Mr. Kajol Bala, faculty member, MPBME, Mr. Mridul Saha, ExCom iHub, Jobairul Islam, JS, Bangladesh Medical Physics Society (BMPS), Sadia Afrin Sarah, ExCom, BMPS, Sujan Mahamud, ExCom, BMPS for their continuous support. She also thanked all the invited national and international scientists, academician, students and other participants from home and Nepal, Pakistan, Malaysia, Germany and other countries.

And lastly, **Dr Tabassum** thanked all and closed the program by wishing all a safe and healthy life.

## An International Webinar On: "Contribution of Women Scientists during Corona Pandemic"









Moderator Dr Tabassum Mumtaz Secretary, **OWSD** Bangladesh National Chapter



Speakers









The Organization for Women in Science for the Developing World (OWSD). Bangladesh National Chapte

Dept. of Medical Physics and Biomedical Engineering Gono Bishwabidyalav

Innovation Hub Gono Bishwabidyalay

Dr. C H Yeong

Dr. H A Azhari

Dr. S Parveen

Dr. N S Juyena

Introduction of organizers by Dr. Tabassum (moderator)





HISTORY: CAN'T AVOID HEALING THE ECO SYSTEM

Presentation of Assoc Prof. Dr. Chai Hong Yeong

Presentation of Prof. Dr. Hasin Anupama Azhari







Presentation of Assoc Prof. Dr. Sharmin Parveen

Presentation of Prof. Dr. Nasrin Sultana Juyena





Part of a National and International Participants (Bangladesh, Nepal, India, Pakistan, Malaysia, Africa, and Germany)