S4 - Public Health and Prevention/ Digital Health Opportunities

The introduction has been made by the Chair of the session, **Pr. Fahad Al Zadjali**, Associate Professor and Vice Dean of Research at the Sultan Qabous University at Oman.
He demonstrated how digital health brings opportunities to public health and prevention, through telehealth and telemedicine services, or digital therapeutics (DTx) and analytics. He illustrated by genetic testing &smart healthy homes/cities applications and explained how this market is regulated and enforced.

MrsMariane Cimino, CEO of Hoa-Ora, consultant in Digital Health Transformation (ITG) and Delegate on Digital Health in Numeum in France, has then moderated the session. She explained the different trends she observes in the health sector: IT solutions all along the journey of a patient, the United Nations – Sustainable Development Goals (SDGs) dedicated to Health (in fact, all SDGs), the "Global health" (WHO) definition with all the aspects for the wellbeing of the persons, andthe "One health" definition (including animal health and environment conditions). She finished by the presentation of the Kaiser Permanente Pyramid for Health Population Management.

Then **Mr. Muhammad Ashkanani**, Regional Manager at W3C GCC Chapter in Kuwait, tacked the challenges of Digital Accessibility in the Arab Region. He gave a definition of "accessibility" as "Usability for people with disabilities". He explained how flexibility can bring to accessibility, the difference with usability, and for whom accessibility provides benefit. He listed some standards and guidelinesestablished by World Wide Web Consortium (W3C) and the issues they raise. He concluded on the challenges raised by Digital Accessibility.

Dr. Amir Johri, Environmental/Public Health Professional, currently working with Ministry of Health in Oman, explained the Public health Approach, with the curative and preventive aspects and the three levels of prevention (primary, secondary and tertiary) with examples of each. He illustrated strategic digital capabilities in public health and how interconnected digital technologies were used in the public-health response to COVID-19 crisis. He concluded by the necessity to think globally and act locally, particularly during such a pandemic.

Mr. Hashil Al Hatmi Health Psychologist at the Royal Hospital in Oman, exposed the future of health that will bridge the gap between healthcare professionals and patients with the benefit of remote care and will allow access to data, once 5G and AI will taking healthcare to a whole other level. Thanks to UX Design, self-management, patient empowerment, accessibility and usability of applications will allow building our "wealth" (= health and wellbeing). He exposed how health behaviour can change and illustrated by Udacity an online learning platform he developed.

Pr. Gunnar Nordstedt, Professor Emeritus, Department of Molecular Medicine and Surgery at the Karolinska Institutetin Sweden, listed the areas of disease prevention and explain the primary and second preventions. He explained how AI can be used in preventive medicine to search medical data and uncover insights to help improve health outcomes and patient experiences, and also what are the challenges that AI is raising. He concluded in explaining

how prevention is useful in a chronic disease like diabetes, and more specifically in gestational diabetes.

Mrs Niki V. Santo, Co-Founder/CEO of Swaza an OxygenNanotechnology, explained that, as populations age and we become ever more interconnected, we will continue to see respiratory illnesses emerge and lung injury increase. We need to learn the lessons of the pandemic to build material resiliency and knowledge resiliency into our medical systems. We also need to expand our toolkits of therapeutic options to respond to changing landscapes.