Inaugural Asian Paediatric Ethics Conference 2nd and 3rd October 2023



<u>Plenary 3 speaker</u>

A/Prof CHAN Mei Yoke KK Women and Children's Hospital, Singapore

Associate Professor Chan Mei Yoke MBBS, MMed (Paeds), MRCP, FRCPCH, MBE graduated from the National University of Singapore with a Bachelor of Medicine and Bachelor of Surgery. She trained in Paediatrics in Singapore and subspecialised in Paediatric Haematology/Oncology in Royal Marsden Hospital and Great Ormond Street Hospital in London, United Kingdom. She has an interest in Paediatric Palliative Care and helped set up a comprehensive paediatric palliative care service in KK Women's and Children's Hospital (KKH) in Singapore in 2004. She also has a keen interest in medical ethics due to the nature of her work and obtained a Masters in Bioethics from Harvard University, USA in 2022.

She is currently a Senior Consultant in Paediatric Haematology/Oncology and is the Chair of the Hospital Clinical Ethics Committee in KKH.

Presentation title: Ethical Issues in Paediatric Precision Medicine

Abstract

Since the Human Genome was sequenced in 2003, exploding knowledge and new technologies in the field of genomics have given rise to the nascent field of precision medicine, whereby treatment is individualized to patients based on their genetic information.

However, as with any new scientific advancement and technology, precision medicine has the potential to improve health outcomes but raises ethical questions, particularly in children. Using paediatric precision oncology as an example, this talk focuses on the ethical issues in the integration of genetic information in the management of children with cancer, using case studies as an illustration of the ethics of implementing paediatric precision medicine more generally. Paediatric precision oncology encompasses the use of the child's genetic information to aid in diagnosis, risk stratification and prognostication; as well as potentially "precisely" treating the cancer using genomically-guided targeted therapies. In addition, the genetic information may have implications for other members of the family as well.

The main ethical issues identified include the difficulty in obtaining informed consent from parents and assent from the child; the ambiguity between research and clinical care; the disposition of incidental findings; the utility of this novel technology; and the potential to widen health disparities thus affecting justice.

Recognising and addressing these ethical challenges will go a long way to help guide the responsible implementation and integration of precision medicine into standard of care in childhood conditions.