

Bioethics in utilisation of digital technology for clinical research

Lee Keng Yee

Ethics & Research Surveillance, National Institutes of Health

ABSTRACT

Summary: With the advancement of digital technology, the bioethics for such clinical research has become more and more challenging and requires more assessment and discussion. The development of 5G enabling faster internet connection, and hence telemedicine is now another alternative which is more feasible and practicable. Development of artificial intelligence by using big data in healthcare is now targeting on to produce algorithms that provide predictions in myriad health conditions. However, social value of such research requires careful assessments and considerations by ethics committee. Privacy and confidentiality of such data may also raise ethical issues as some of these detailed data may question the anonymity of such data. Ample of mobile applications have been developed for health monitoring and health education, and careful examination of the validity of the usage is crucial to ensure the safety and wellbeing of their users.

Investigation of Chikungunya outbreak in Perak, 2019-2020

Teoh Boon Teong

Tropical Infectious Diseases Research & Education Centre (TIDREC), Universiti Malaya

ABSTRACT

Summary: Chikungunya virus (CHIKV) is a vector-borne virus which is transmitted primarily by *Aedes aegypti* and *Aedes albopictus*. Between 2016 to 2020, CHIKV outbreaks were reported in several Asian countries including Malaysia. WHOCC for Arbovirus Reference & Research at TIDREC, Universiti Malaya, Batang Padang District Health Office, as well as several local clinics and community management councils have worked together to perform on-site outbreak investigations in Perak, Malaysia between October 2019 to March 2020. A total of 82 blood samples were collected and screened for CHIKV infection. The positivity rate of CHIKV infection among the specimens collected was 71.6% based on the detections by both CHIKV real-time reverse transcription polymerase chain reaction (RT-PCR) and CHIKV-specific immunoglobulin M and immunoglobulin G enzyme-linked immunoassay (ELISA). Laboratory-confirmed Chikungunya cases were notified to the Perak State Health Department for immediate vector control operation. Community talks were also organised to encourage a better understanding, mindset, and practice in preventing mosquito-borne diseases among the local community.