Artificial Intelligence (AI) is mimicking of human cognition by computer / I.T equipment that can sense, reason, comprehend, discover meaning, generalize and learn from experience. Computer learns from data over time and allows us to use large amount of new complex data and can perform administrative and clinical healthcare functions.

IMELF 2018 organized by RCPSC has innovative theme of "Leadership in the Face of Artificial Intelligence". Machine learning is a new concept and computer can recognize speech, process and analyze digital images, pictures, video to extract computer data. Future utility of AI in health sector may include, medical record, transcript, robotic surgery, simulation, health monitoring and health care system analysis and medication management. A good debate was held in IMELF whether medicine and medical education is an art, and as an art, is somewhat immune to disruptive innovation or it is no different than any other industry and likewise without paying attention to technology, it could be "blindsided" by innovation and whether in future physicians will be replaced by machine or not. General consensus was, they are going to magnify human ability like mobile phone, amplify the power of human speech similarly cognitive revolution will allow computer to amplify the capacity of human brain and make it stronger. They will not be competitive, they will augment with each other. This compliment will lead to paradigm shift of changes of workforce activities in other sectors, including voice printing and computer vision, recognition, response suggestion, international performance improvement and training, tailored recommendation and employee interviewing and screening. Artificial Intelligence application can facilitate in existing area including diagnostic and therapeutic imaging, disease prognosis, robotic surgery, diagnostic and monitoring of cardiac and neurological conditions. There are challenges in application of this innovation as online information is certified in relatively unregulated environment having issue of good governance. Most important its application in setup like ours will be more challenging due to limited best practices and lack of expertise to analyze big data. We need to have courageous education leaders of integrity with good temperament who are human and believe in judicious use of new technology and innovation for mankind and quality health delivery system. Their leadership role is to augment the use of combination of big data and artificial intelligence in medical education and best medical practices. They use I.T to improve clinical care in health policy making and globalization of medical education. In summary physicians and artificial intelligence are synergistic and not competitive, they compliment for the best and optimal result.