

# The Making of 21st Century Doctors of Bhutan; Use of Artificial Intelligence, Big Data and Values Appropriate for the New Normal in the 21st Century

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## Introduction

Big Data and Artificial Intelligence (AI) is an integral part of “digital natives” or millennials including in our professional life. Many are handicapped without the presence of digital environment. The COVID-19 pandemic has forced both the economic and scientific world to resort to virtual meetings, virtual classes and even the WHO has gone virtual for many of its important meetings.

However, humanistic values have served the medical practices well for centuries, therefore there is and need to explore on a convenient the marriage between time-tested values with new partners such as AI and Big Data.

## Artificial Intelligence and the Black Box Phenomenon

The potential use of AI in Medical Education in Bhutan provides valuable insights. The positive aspect of technology includes reducing the work performed by humans, cost reduction, accuracy and fastness of diagnosis.

However, there are risks to health professionals as well as IN service delivery of AI such as the “Black Box Phenomenon”. Further, medical technologies are modifying in a rapid manner, which is not necessarily need of a doctor but more of economic driven (Supe, 2020; Siebeck, 2020).

One must be mindful about the AI ethics, moral, social and critical aspects. If a person is not well educated to handle AI, there is a risk of cyber-attack or receive misclassified medical information that will ultimately harm the lives of patients. Therefore, AI can never replace a self-reflective medical professional in human form. (Supe, 2020; Siebeck, 2020).

## Technological Domain in Medical Education

The entire medical community must appreciate that the New Normal has accelerated the digital transformation of medical education. Simulation-based education and virtual reality has now become integral components of medical education. Many competencies such as clinical skills, procedure-based skills, team work, and leadership can be trained through simulation. With creativity and imagination, only sky is the limit”. In the era of technology, make the best use of the technology and take the new normal as a blessing in disguise. If you look in the right places, tomorrow’s technology is already there. (Karunatilaka, 2020; Siebeck, 2020; Pradhan, 2020)

## A Black Swan Event (COVID-19 Pandemic)

COVID 19 pandemic has impacted the medical education globally. This black swan event has forced to reshape the future of medical education in a drastic manner. All stakeholders of medical education have been made to strategize on how to deliver the Teaching-learning activities at the times of black swan.

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