

Editorial

New Technologies in Cardiac Critical Care Social Economic Challenges: A Reality Check

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J Card Crit Care

The epicenter of medicine, in recent times over the past 40 years, has moved from the doctor to the patient. This has reduced the status of the physician to that of a specialized technician, who cannot make any mistakes, thanks to the internet too. The result is that the patient does not listen to the doctor but depends on the technology and internet-based information. The letter has moved from 2% in the early 18th century to 73% in 2016.

Critical care or intensive care medicine surgical care has grown by leaps and bounds in the recent years. Growth is never without resistance to provide much needed care in the intensive care units (ICUs). The simulated ICU of the future will have adapted to several edge technologies to constantly reduce the need for human intervention. With advanced medical devices other support systems that redefine the existing operational ecosystem, will come to the forefront. The cost of ICU stay will increase despite the atmosphere becoming more hassle-free!

Bed Occupancy in Indian ICUs

In an overpopulated country like India, nearly 1.35 billion beds are occupied in the ICU. Wards are ~5 million patients, overall in approximately 70,000 ICU beds which are available in all big hospitals and small nursing homes in India. This increases the burden of increasing the skills of the intensivists. Cardiac Critical Care in India has entered its youthful stages. Various Medical Association such as Indian Society of Critical Care Medicine, The Simulation Society, and Critical Care Nursing Society, etc. are academically empowering medical personnel to enhance their critical care knowledge and skills to have in Indian Civil Service well-trained personnel. Fellowship in Cardiac Critical Care (FICCC) is the first of its kind online course in its third year ending with a good accreditation.

Emergence of e-ICUs and Simulation System in the ICU

With the advancements in the digital networking and with increasing staff, equipments are new technology-based clinical approach (echocardiography, extracorporeal membrane oxygenation, point-of-care biomarkers for sepsis, inflammation ischemia, and advanced hemodynamic monitoring invasive ventilation). The costs are mounting in the ICU stay as ventilator day's increase and maximum technology-based benefits are accrued to the ICU patients.

Telemedicine-Based Monitoring the e-ICU

With the increasing cost in ISO setup rising to nearly 103,000 crores in Healthcare in 2012, will grow to 283,000 crores by 2021. India is a tipping point both in terms of economic growth and in the human development of its more than 1 billion citizens. The country is the sixth largest economy in the world with its gross domestic product (GDP) at 2.6 trillion dollars in 2017. With 2019 GDP being projected a growth rate of nearly 7.5%, it continues to be a major engine of global economic growth.

According to the World's economic forums' insight report, the future of growth depends on a fast growing consumer market, division of increased incomes with a broad-based pattern of growth, and benefit sharing.

Life expectancy is affected by the climate changes and diseases. Today, with the increased life expectancy, the patient leads a longer life. Older patients are on the rise! With the advancement in technology and life expectancy increasing alarmingly, we are into an era of robotics, nanotechnology, biotechnology, artificial intelligence, and advanced imaging. We work in a three-dimensional and four-dimensional environment and with this imaging and navigation, there is no

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room for any mistake! Nanotechnology medications to be delivered through the microvasculature change in lifestyle with technology will lead to better health and an aging population. Technology affects ethics. There will be no equity left between citizens and countries. This will have a modern social impact where in there will be a burden on the government of financing larger number of retired people with emerging personification in living with future generations before the retired population.

With the greater development in the market like positron emission tomography scan, transcatheter aortic valve

replacement (TAVR) there will be a financial crunch leading to À La Carte medicine. Public is a bigger training school and technology should be funded by the citizens of the country, integrating it with the government as a private public venture. It is up to the doctors to rise to this problem by knocking the doors of our government to make new technology available with less finance.

The doctor in the ICU is the intermediary.

Conflict of Interest

None.