ASSIGNMENT 4
Inovation in Health care

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0.1 ACKNOWLEDGEMENT

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- Thanking You

- Tushar Baghel

0.2 What is Heath Care System

A health system, also known as health care system or healthcare system, is the organization of people, institutions, and resources that deliver health care services to meet the health needs of target populations.

The goal of a healthcare system is to enhance the health of the population in the most effective manner possible in light of a society's available resources and competing needs.

0.3 Present Heatlh Care

The doctor-to-population ratio in India is 1:214 Though hospitals, dispensaries, public health centers and other medical facilities are present, they are not sufficient to cater to the growing needs of India's substantial population. Rural access to quality medical service has to be improved.

The inadequate manpower of doctors in public sector hospitals is also a concern for health authorities. Furthermore, the infrastructure required in the hospitals, like medicine, furniture and equipment, are not adequate to serve the population. Compounding the problem, government spending on healthcare services is not up to the World Health Organization (WHO) norms of gross domestic product in healthcare.

0.4 why Inovation is needed?

Innovations in healthcare can drive economic growth by improving efficiency and increasing productivity, as well as optimizing patient outcomes.Thus inovation are much needed today so that in future our Health Care goes better and can help mankind.

0.5   Top Inovation in present Years

1.   Artificial Intelligence (AI)-Artificial intelligence (AI) is the ability of a computer or a robot controlled by a computer to do tasks that are usually done by humans because they require human intelligence and discernment.
What are the 4 types of AI?
According to the current system of classification, there are four primary AI types: reactive, limited memory, theory of mind, and self-aware.
"A year spent in artificial intelligence is enough to make one believe in God."
Example are- Maps and Navigation,Digital Assistants Social Media,E-Payments etc.

2.   3D printing, or additive manufacturing, is the construction of a three-dimensional object from a CAD model or a digital 3D model. The term "3D printing" can refer to a variety of processes in which material is deposited, joined or solidified under computer control to create a three-dimensional objec.
3D printing is used for the development of new surgical cutting and drill guides, prosthetics as well as the creation of patient-specific replicas of bones, organs, and blood vessels.

3.   Robotics-Medical robots assist with surgery, streamline hospital logistics, and enable providers to give more direct attention to patients. Robots in the medical field are transforming how surgeries are performed, streamlining supply delivery and disinfection, and freeing up time for providers to engage with patients.
What is the Future of Robotics in Healthcare?
With new applications and features, healthcare robots are expected to increase the quality, operational efficiencies, accuracy, and safety in healthcare service delivery. The advancement in AI will provide a new dimension to robotics. As expected the combination of Artificial intelligence and robotics will make the operation faster and much safer.

0.6   Upcoming Inovation and Technology

1.   Lab-made dairy products

You've heard of cultured "meat" and Wagyu steaks grown cell by cell in a laboratory, but what about other animal-based foodstuffs? A growing number of biotech companies around the world are investigating lab-made dairy, including milk, ice-cream, cheese and eggs. And more than one think they've cracked it.

The dairy industry is not environmentally friendly, not even close. It's responsible for 4 per cent of the world's carbon emissions, more than air travel and shipping combined, and demand is growing for a greener splash to pour into our tea cups and cereal bowls.

2.   3D printed bones

3D printing is an industry promising everything from cheap house building through to affordable rugged armour, but one of the most interesting uses of the technology is the building of 3D printed bones.

The company Ossiform specialises in medical 3D printing, creating patient-specific replacements of different bones from tricalcium phosphate – a material with similar properties to human bones.

Using these 3D printed bones is surprisingly easy. A hospital can perform an MRI which is then sent to Ossiform who create a 3D model of the patient-specific implant that is needed. The surgeon accepts the design and then once it is printed, it can be used in surgery.

3.   Artificial eyes Bionic eyes have been a mainstay of science fiction for decades, but now real-world research is beginning to catch up with far-sighted storytellers. A raft of technologies is coming to market that restore sight to people with different kinds of vision impairment.

In January 2021, Israeli surgeons implanted the world's first artificial cornea into a bilaterally blind, 78-year-old man. When his bandages were removed, the patient could read and recognise family members immediately. The implant also fuses naturally to human tissue without the recipient's body rejecting it.

Likewise in 2020, Belgian scientists developed an artificial iris fitted to smart contact lenses that correct a number of vision disorders. And scientists are even working on wireless brain implants that bypass the eyes altogether.

0.7   Conclusion

In present there are many problem which can be solved by technolgy and Innovation in future thus technology will play a major role in upcoming future healthcare. Technology such as artificial intelligence and robotics are some technology which will be very beneficial in upcoing future healthcare.Future healthcare will be focousing on hat area where present heathcare is lagging behind and this will help to improve our heathcare system and make it effecient.

Thank You