

NATIONAL INSTITUTE OF TECHNOLOGY, RAIPUR(C.G)

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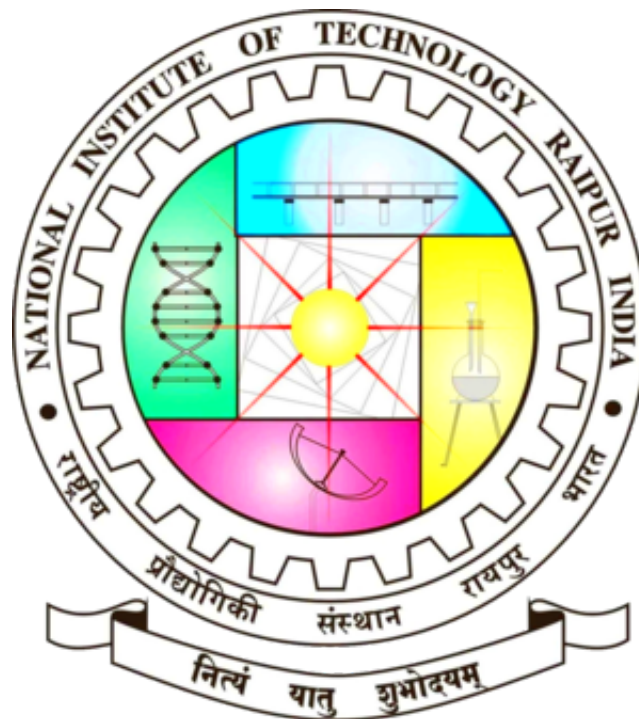


Figure 1: National Institute of Technology, Raipur

ASSIGNMENT-2 OF BASIC BIO-MEDICAL ENGINEERING

Evolution of Modern Health Care System

Historical Overview

Over the last 10 years, however, there has been a shift to concentrating on patient safety in hospitals. Now we'll first examine hospital patient safety in a historical context, explaining how the patient safety that is no longer appropriate for an increasingly at-risk group of patients. Our intention is to provide best medico facilities as first aid as well as large level and also will concentrate on the emergence of systems to improve patient safety in acute care hospitals. In the earlier century we was not well aware about medicines, but as now if we feel a minor headache we take some tablets like crocin advance 500, vicks action 500, vasograin etc. instantly because we have believe on medicine and also on medical devices which all related to biological science.

Healthcare system digitalization would provide medical disease management, definition of more efficient therapies and consequently better quality of life, with financial savings.

The causes of Evolution of modern health care system are:

1. We find medicines and medical devices easily on medical stores or wherever we can find nearer.
2. Evolution could only happen by awareness and interest about this fields and that is happened and we are doing further studies to get better results. Thus we can do initiation of compaign so that everyone can get awareness about the modern healthcare sytem.
3. People also like compact and lightweight medical devices so that they can travel anywhere with that thus they can get instant diagnostic effects whenever they are facing problem or irrelevancy/discrepancy in their physical health. for eg. portable monitors,smart beds etc.
4. One of the major reason is that we are having believe that modern diagnostic and therapeutic components having very less side effects but it is not always true. There are having side effects but they are very acute so we dont mind themselves.
5. Along with that we have many cases to define how evolution of modern healthcare system priortise.

Technology in Health Care

A 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 most immediate barrier to widespread adoption of technology is cost despite the patient benefit from better health, and payer benefit from lower costs. However, hospitals pay in both higher costs due to the reason patients reduced patient length of stay. The benefits provided by technological innovations also give rise to serious issues with the introduction of new and previously unseen error types. Here we have some technologies which are using everywhere like in hospitals,24*7 health care hospitals are:

- Electronic health record(EHR)
- Computerized Provider Order Entry(CPOE)
- Complete Safety Medication System
- Personalized Medicine
- Blockchain
- Telehealth
- Cancer Immunotherapy
- AI and Machine Learning

These all types of technologies helps us as:

- Improving patient care and experiences
- Real-time information exchange
- Dealing instantly with patients with videocall



Figure 2: Health care mobile app image

The Meaning of Modern Health Care System

The term "**MODERN**" means that what we can implement and what effective therapeutic effects are providing to the public by technical instruments or devices in newly upcoming diseases like Covid-19.

A health system consists of all organizations, people, and actions whose primary intent is to promote, restore, or maintain health. This includes efforts to influence the parts of health as well as more direct health-improving activities. It is therefore we can say publicly owned facilities that deliver personal health services. It includes, for example, a mother caring for a sick child at home; private providers; behavior change programs; vector-control campaigns; health insurance organizations; and occupational health and safety legislation. It includes inter-sectoral action by health staff, for example, encouraging the ministry of education to promote female education, a well known determinant of better health.

We use sensors to determine the physical reading which is happening in the body. Here we have pasted a photo to clearise this thing

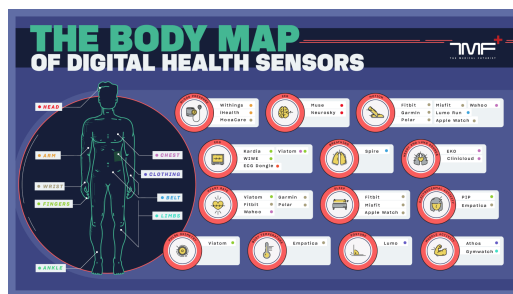


Figure 3: Compiled body map sensors image

There is a wide variety of health systems around the world, with as many histories and organizational structures as there are nations. Implicitly, nations must design and develop health systems in accordance with their needs and resources, although common elements in virtually all health systems are primary health care and public health measures.

Awareness can play very vital role to enhance the potential of Modern Healthcare System.

And one another reason may be Evolution is providing clues about puzzling medical results, and studies of human health are giving us new information about the rate and driving forces of evolution.