Solutions to Covid19 provided by Biomedical Engineers-

Sarthak Kulshrestha

March/4/2022

NIT RAIPUR

1 Introduction

The responsibility of biomedical engineering professional include overseeing the research and development design safety and effectiveness of medical devices,selection and procurement.Installation integration with electronic medical records system,daily operations monitoring,managing maintenance and repair, training for safe use and upgrading of medical devices available to health care stakeholder. in these section we studied about problem faced by people during COVID 19. and how biomedical engineer overcome the problem.

2 Solutions Given By Biomedical Engineers-

2.1 Home Quarantine Facility-

During COVID 19 it is necessity to monitoring the health of a COVID infected person . But due to invasive number of COVID case it is impossible to keep a track on every patient health condition. Also contact of doctor with COVID affected person ,it may infected to our doctor for monitoring purpose.So, Biomedical Engineer thinking about doctor and patient health,they introduced, remote patient health monitoring that tracks patient vital remotely

2.2 Covid Testing Kit-

COVID Testing is needed on a large scale to test as many people as possible,but manaual COVID test booth pose a large scale .Smart IOT COVID test booth automator for paperless registration and online simple linking. As it's a contact less COVID Testing so it helps to prohibited or spreading a virus due to contact.

2.3 Virtual Doctors-

As during COVID people need doctor at every place every time but it can't be possible to available at everytime. Also online video call limit the doctor capacity to a stationary laptop or mobile screen.So for solving these problem our biomedical engineer introduce a virtual doctor robot, which move around and make contact at remote hospital.

2.4 Pulse Oximeter-

pulse oximeter measures how much oxygen is in someone's blood. It is a small device that clips onto a finger, or another part of the body. They are used often in hospitals and clinics and can be bought to use at home.A normal level of oxygen is usually 95

2.5 Disinfectant Box-

As complete sanatization is essential to reduce the chance of injection.As we know liquid based sanatized is can't be used on electronic or paper we touch which cause spreading of virus among people so for solving these problem our biomedical engineering can be make a sanatized which contains no wateror any chemical which damage the electronic.

3 Conclusion-

We have tired to access the impact of biomedical engineering in trackling the COVID 19.Together the engineering and medical field have workedto address area of critical need including the production and delivery of personal protective equipment, ventilator as well as creation of viable vaccine.The fight against COVID 19 had helped highlights the works and contribution of so many proffessional in bioengineering field who are working continuously to help our health services cope.