

20th century medicine essay sample

[Health & Medicine](#)



**ASSIGN
BUSTER**

The merger between physics and medicine in the 20th century has paved the way to the technological advancements in medicine that have made possible the significant increase in the human life's expectancy to approximately 30 years. In particular, these technological advancements have affected procedures in medical fields such as Microbiology and Pathology, Nutrition, Surgery, Radiology, Neurology, Genetics and Biotechnology, Endocrinology, Gynecology, Cardiology, Telemedicine and Cancer Medicine (Medicine, 2007). These particular fields in Medicine are important especially as statistics of mortality and morbidity in the past centuries relate to the extent of knowledge and practice attained at the time in these fields.

Suddenly with the discoveries in chemistry and immunology in the early years of the 20th century, illnesses that used to kill became conditioned to the point of innocuousness. The discovery of arsphenamine, penicillin and sulfonamide not only led to the treatment of different microbial diseases but became the pioneer of subsequent discoveries of drugs which are more effective against more potent microbes (Medicine, 2007).

During the 20th century, surgical procedures were made more convenient both for the patient and the medical practitioners. Innovations were made to reduce the risk of death resulting from treatments as techniques became less invasive with the invention of small fiber-optic instruments. As a result, the amount of anesthesia needed during surgery and the patient's recovery time are reduced. Some conditions are even possible to treat without the use of surgery.

Kidney stones and gallstones, for example, can be treated using Lithotripsy which uses high-frequency sound waves. X-rays now, can be used to treat some forms of cancer. Also, Psychosurgery is now rarely used in the treatment of certain mental illnesses because of the availability of certain drugs and new methods. Meanwhile, organ transplants became less dangerous and rejection of organs became less possible with the discovery of better drugs and improved medical technology. The 20th century innovations have not only improved the treatment and prevention of diseases. It has also improved the prognosis of diseases particularly that of surgery and mental illness (Medicine, 2007).

As scientists gained more knowledge about the immune system, and as new technologies were developed, the direction of the Medical field pointed towards the prevention of diseases. Improvement of sanitation, new tests for diagnosing diseases, and the creation of new vaccines were the focal points of the study of Medicine.

Yellow fever, influenza, polio, measles, German measles, mumps and chicken pox were significantly minimized by the discovery of different vaccines. Casimir Funk's introduction of the term *vitamine* prompted the identification of the compounds necessary for the prevention of diseases. Scurvy, which used to plague sailors, is now prevented by mere intake of sufficient vitamin C. Specific vitamins are now used to prevent diseases such as beriberi, rickets and pellagra (Medicine, 2007).

Prevention of diseases was improved especially with the invention of new methods for viewing diseased structures. Computed Tomography (CT),

Magnetic Resonance Imaging (MRI), Positron Emission Tomography and ultrasound are scanners which are used to produce images in order to detect early signs of diseases or monitor certain conditions such as pregnancy. Discoveries in Genetics and Biotechnology have also been applied in the diagnosis and treatment of diseases. This way, the gene itself is identified to determine possible diseases, and is modified to treat the diseases (Medicine, 2007).

However, with this medical revolution, as more discoveries are made on disease management and prevention, and as the quality of human life improved come newer forms of diseases to which present medical knowledge is still unequipped. Concerns over new forms of viruses and microbial diseases like Human Immunodeficiency Virus (HIV), Hemorrhagic fevers, Hantavirus Pulmonary Syndrome, Lyme Disease have risen. In Nutrition, while disorders used to relate to the lack of intake of specific compounds, the 20th century came face to face with disorders associated with lifestyle such as obesity, heart disease and diabetes mellitus (Medicine, 2007).

Advances in research and technology allowed the development of the field of Medicine from prevention to greater prognosis in what used to be diseases equivalent to death. But compounded with this development is the emergence of new sets of diseases and conditions. These pose to be a problem to the field as it stands defenseless to these new breed. However, it must not be seen as one but as a challenge to further improve the present

knowledge. Humanity had withstood plagues; it can withstand whatever new form of medical challenge that will emerge.

Reference

Medicine. (2007). In *Medicine* (Chapter 8). Retrieved 01 November 2007 from http://encarta.msn.com/encyclopedia_761567832_1/Medicine.html.