THE STORY OF DISEASE: AN ALTERED HISTORY

Reena Kulshrestha 1, Dr Jayant Biswas 2, Dr Soudeep Sau 1, Surendra Singh 1
1Rungta College of Dental Sciences and Research, Bhilai -490024, C.G., 2President, National Cave Research and Protection Organisation, Raipur, C.G.

Correspondence: reena_2k5@rediffmail.com

Abstract

A disease is an abnormal condition of an organism that impairs bodily functions associated with specific signs and symptoms. This first journey of disease was started by Circa in the year 1450 when Circa published the article titled “Natural enemy” which stated that The disease is a myth, free, localized, organic farming and idyll of the past, in 1484 - An Egyptian Priest described a venereal disease as uxedu, which affects eye, ear, skin and now known as Syphilis. During that time physicians could do little or nothing for the people and so they died by diseases. Later in 1496- Lyons, the first city to think that the disease was a new plague and the ill were forced out beyond city walls, for the disease developed slowly and the first signs, occurs occurred especially in women. During that era the world’s population was about 435 million. Today population stands at about many billions and one million new children are born each day. This dramatic increase is due to primarily significant improvements in medicine, food production and living conditions.

Key words: Disease, symptoms, pathogens, reservoir, susceptible

Introduction

Disease is more than a pathological phenomenon; it is an abnormal condition of an organism that impairs bodily function associated with specific signs and symptoms. Interaction between the nervous and immune systems provides a physiological basis for psychosomatic medicine.

The natural history of disease refers to a description of the uninterrupted progression of a disease in an individual from the moment of exposure to causal agents until recovery or death. Knowledge of the natural history of disease ranks alongside causal understanding in importance for disease prevention and control.

Natural history of disease is one of the major elements of descriptive epidemiology. To continue to exist, a pathogen must reproduce and be disseminated among the hosts. This story of the disease is linked by 5 stages:-

The cause of the disease:
The first link in the story of a disease is the pathogen. There are numerous pathogens that can cause infectious diseases in man, so the exact cause of the disease must be discovered.

The source or reservoir of the pathogen:
The second link of the story is to identify the source / reservoir and its elimination and control that may prevent transmission of the pathogen.

A source is the location from where pathogen is transmitted to host either directly through the environment or indirectly through the intermediate agent.

The reservoir is the site or natural environmental location in which the pathogen is normally found living and from which infection of the host can occur.
Transmission of the pathogen:
The occurrence of this third link of the story is important to maintain an active infectious disease in human population. It occurs by various routes such as – Air, Contact, Vehicle, and Vector.

Host susceptibility to pathogen:
The susceptibility of the host to a pathogen is the fourth link of the story and depends on pathogenicity of the organism and defense mechanism of the host.

Pathogen leaves the host:
The fifth link in this story is release or exit of the pathogen from the host. Unless a successful escape occurs, the disease cycle will be interrupted and the pathogenic species will not be perpetuated.1-8

History of Disease: The history of the disease is of surpassing interest in itself. To enter into a history of the disease would take up more time and space than can be afforded, and would only be a rehearsal of what is already recorded in regard to the visitation.

1. Some important landmark dates and events of this story:-
200 AD - Interaction between the nervous and immune systems provides a physiological basis for psychosomatic medicine. In approximately 200 AD, the Greek author Galen wrote that melancholic women are more susceptible to breast cancer than sanguine women. Since then, a ...cGreek author Galen wrote that melancholic women are more susceptible to breast cancer than sanguine women. Since then, a wealth of anecdotal evidence has convinced physicians of the importance of psychological factors in the prognosis of disease.9
303 AD – Eusebius, Sprinkling originated in the baptism of the sick, but did not come into general use until after the eighth century AD when it was legalized by the Pope Stephen.10
306AD - Lingnan Ge Hong, as malaria was endemic, he was able to carefully study the various temperatures. Ge Hong left behind generations of medical and Lingnan temperature monograph, physician summed up the working people to send long-term disease control in the process of experience, formed a strong herbal tea culture, its formula, and the term generation to generation.
330AD - It prevailed in Egypt and Asia Minor, and hence was early called an Egyptian or Syriac disease, being akin to the plague, of having had some origin with some similar characteristics like malignant typhus, highly contagious, the disease, in its 1500 years’ transit on the continent of Europe.11
400AD - An Indian Medical Book recorded a disease marked by pustules and boils, saying “the pustules are red, yellow and white and they are accompanied by burning pain…the skin seems studded with grains of rice. “ The Indian epidemic was thought to be punishment from a God, and the survivors created a Goddess, Sitala, as the anthropomorphic personification of the disease. Smallpox was thus regarded as possession by Sitala in Hinduism.12-13
500AD - Etius, refers to the use of the magnet for the cure of disease. He says:“We are assured that those who are troubled with gout in their hands or their feet, or with convulsions, find a relief when they hold a magnet in their hand.”14
500AD - Diabetes mellitus was known to ancient Indians as early as sixth century BC “Charaka Samhita” has mentioned the sweetness of urine in addition to polyuria. The Indian physician Susruta described the disease as “Madhumeha” meaning rain of honey, with symptoms of foul breath, voracious appetite and languor. The physician Wang Tao in 752AD mentioned that diabetes was indicated by sweet urine and the recommended the consumption of pork pancreas as a treatment, implying that the pancreas was the organ involved in the disease.15-16
700AD - Leprosy is a very ancient disease, known to the Egyptians and Greeks many centuries before Christ. Leprosy hospitals were established in AD 636 in Italy, France and Belgium. In 757 and 789 Charlemagne made it a cause for divorce and declared such marriages unlawful.17
900AD - The flour produced was then contaminated with the toxic alkaloids of the
fungus. In southern France, nearly 40000 people died of Ergotism. As the cause was unknown, no cure was available until people realized that the consumption of Ergot was the cause of the disease, there was no rational way 18.

1000 - Records of Fluoride air pollution was recorded when a volcanic eruption in Iceland caused a crippling disease in sheep, identified as Fluorosis, or fluoride poisoning, and traced to high levels of fluorides in volcanic gases.

1100 – The Kissa Yojoki (Book of Tea), written by Zen priest Eisai, describes how drinking tea have a positive effect on the five vital organs, especially the heart and also helps easing the effects of alcohol, acting as a stimulant, curing blotchiness, quenching thirst, eliminating indigestion, curing beriberi disease, preventing fatigue and improving urinary and brain function.

1200 – Malignant Leprosy “Galloping Syphilis” recorded in Europe according to Michael Scott: it was contracted by sexual intercourse with leprous woman19.

1300 – The name influenza was first given to a disease that caused an epidemic of fevers in Venice, thought to be caused by “influence” of an odd alignment of the planets.

1450 – The Renaissance emerged from a period of disease and depression. The bubonic plague caused massive population loss for Europe, consequently economic downturn. People were forced to move out of city. Circa published an article titled “Natural Enemy” existing disease is a myth, free, localised, organic farming and idyll of the past. It is said that most of the inhabitants of Machu Picchu, a pre- Columbian Inca in Peru, were wiped off due to the dreadful disease “Small pox.”20

1458 – Alfonso was attacked by fever. The disease was probably a Typhoid fever of the type still so closely associated.

1484-The early Egyptian priest- physicians describe a venereal disease, then known as uxedu, which, from its eye, ear and skin symptoms closely resembles Syphilis.

1493 – Syphilis was introduced into Europe by the mariners of Columbus on their return from the New World.

1495: A disease characterised by ulcers of the genitals, general eruptions of the skin, violent pains in the head and limbs broke out in French Soldiers.

1496 - The first city to think the disease was a new plague was Lyons. The ill were forced out beyond the city wall, for the disease develops slowly and the first sign appears in women. The patients were not allowed to hold any communication with the people outside, breach of this regulation was punished by imprisonment and corporal punishment21.


1521 – As a result of Bloodshed, intermarriage and rape, a new race was born, el mestizo, el mexicano, people of mixed Indian and Spanish blood, able to survive smallpox, measles and typhus.

1546 - Fracastor, Greek poet, in his work “De Contagionibus” – divided contagious disease into 3 classes- disease catching by contact, disease carried by fomites, and disease conveyed by air.

1557 – Aneurism of the Aorta reported for the first time.

1591 – Rheumatoid Arthritis had been given a name by French physician Guillaume de Baillou.

1600 – Hemolytic Disease of the foetus and new born was described by a French midwife in a set of twins: the first twin was hydropic (swollen and edema fluid) and still born, and the second twin was deeply jaundiced and subsequently died of kernicterus25.

1650 – Glisson, gave a description of the disease and used the term Rachitis.

1664 - His great work, Cerebri Anatome, cui Accessit Nervorum Descriptio et Usus (anatomy of the brain, with a description of the nerves and their function), published in 1664, is a datum point in the history of neuroscience.

1672 - There is a rich history of headache's history; first recorded system was published by
the Thomas Willis about Heart Disease. Heart is centre of cardiovascular system, that's why heart disease is called cardiovascular disease.

1712 – The disease caused by local implantation and proliferation of Streptothrix Madura; and possibly of other fungi; usually confined to foot or hand, painless, and without constitutional symptoms.

1718 – Discovery of vaccination by Jenner, smallpox being the most virulent of contagious disease.

1721 – The first method of immunisation was by inoculation of pus from smallpox pustules, a process called, Variolation, appears to be arisen in India and China.

1735 – Pellagra disease was first described by Gaspar Casal in Spain, earlier called as “Austrian Leprosy”

1743 – French surgeon Francois de la Peyronie, for the first time described Peyronie’s disease26.

1747 – The history of Vitamin C is tied in with the history of the dreaded disease affecting sailors known as Scurvy.

1750 – Harlequin ichthyosis or Harlequin disease, a skin disorder by genetic abnormality was reported27.

1761 – Chron’s disease, initial description of it by Giovanni Morgagni as ileal ulceration and enlarged mesenteric lymph nodes in young man who died of an ileal perforation28.

1817 – Parkinsons disease was first seen in Jessore in India where it committed great havoc among the inhabitants, from where it passed into different countries as first described by James Parkinson29.

1832 – Eight cases of Cholera occurred in, two of which were in individuals who had been exposed to the contagion of the disease.

1849 – Dr Thomas Addison first described the condition known as Primary Adrenal Insufficiency, for which the name Addison’s disease was later adopted30.

1855 – Disease of inferior maxillary, made its first appearance in a five year old patient suffering pain in lower jaw.

1872 – George Huntington described how HD symptoms, a genetic disease, run in families31.

1877 – Byock found a syndrome, Paget’s disease.

1906 – Alzheimer’s disease was first discovered by a German physician named Alois Alzheimer32-33.

1909 – Chagas Disease (American Trypanosomiasis) was first described by Brazilian Researcher Carlos Chagas.

1909 – Chron’s disease was founded by Burril B. Chron.

1941 – Amyotrophic Lateral Sclerosis (ALS), commonly known as Lou Gehrig’s disease, a spreading and worsening Neuromuscular disease was reported34.

1976 – A pivotal date in the history of disease as emergency department reported Legiornaires disease (Legionella pneumophila)35.

1981 – From its first remarkable appearance in the pages of a June 5, 1981, disease bulletin, AIDS has become “the most devastating epidemic in human history”

2003 – The first officially recorded Third Cholera Pandemic.

2008 – The discovery of two, nine thousand year old Tuberculosis victims demolishes the conventional wisdom that humans caught the disease from cows.

2009 – The cholesterol lowering drug Crestor reduces the risk of Heart Attack, stroke and death in patients with no history of heart disease.

Conclusion: In 1500, the world's population was about 435 million. Today, it stands at about six billion and a million new children are born each day. This dramatic increase is primarily due to significant improvements in medicines, food production and living conditions.
References

17. Ortel H. General Pathology- an Introduction to the study of medicine. Hoeber; The University of California; 1921.
20. The history of Machu Picchu/ Clothes from renaissance period, renaissance era dresses souvenirwebsite.com/the-history-of-machu-picchu
27. Office of the Treasurer of the Regents of the University of California at Irvine. UC Annual Endowment Report, Fiscal Year Ended. 2012 June 30; p-4


31. Huntington G. A brief history of Huntington Disease from HOPES: Huntington Disease outreach project for Education at Stanford, History of Medicine Bulletin: The Johns Hopkins University; Medline plus; 1872. April 13


