# Acute Disease vs. Chronic Disease

"When a lot of remedies are suggested for a disease that means it can't be cured." ~ Anton Chekhov





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### Acute Disease definition

Acute disease is a condition or a disorder that comes on or onsets rapidly and lasts for a shorter period of time.

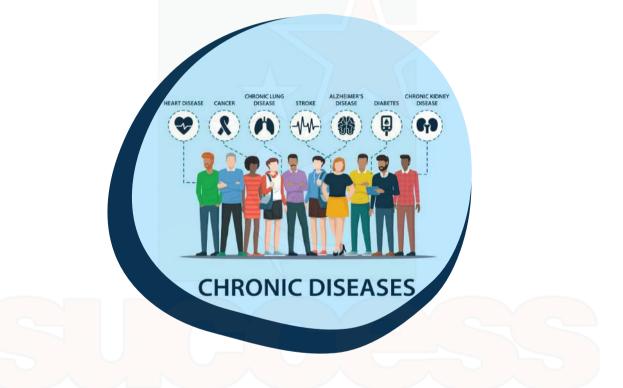


- The period of time associated with acute diseases varies with the type of illness and the context, but it is always quantitatively shorter in time when compared to chronic diseases.
- The term 'acute' is also associated with diseases where the onset is rather sudden and occurs rapidly.
- The severity of acute diseases is mostly fulminant, even though it is not always accurate as in the case of acute rhinitis, which is synonymous with the common cold.

- However, diseases like acute respiratory diseases are mostly fulminant and result in severe consequences.
- Acute diseases are caused mostly by an infectious agent, and thus acute conditions appear in many communicable diseases.
- In addition to the sudden onset of the disease, acute diseases also worsen more rapidly than chronic conditions.
- Acute diseases might affect or occur in all systems throughout the body. But they only affect just one system at a time.
- The treatment associated with acute diseases also differs depending on the nature of the disease.
- Acute diseases like appendicitis, strep throat, and influenza do not require hospitalization or intensive medical treatment. In contrast, diseases like pneumonia and acute myocardial infarction (heart attack), although they are acute, do require immediate medical attention and extended treatment.
- These diseases also do not commonly have long term health effects and can be treated once and for all.
- Sometimes, the diseases might be caused by a simple change in diet like typhoid is caused by drinking polluted water, which can simply be avoided by opting for a cleaner water source.

#### **Chronic Disease definition**

Chronic disease is a condition or a disorder that persists for a longer period of time or has long-lasting health effects.



- As in acute disease, chronic diseases cannot be defined by a particular period of time and are mostly used while comparing them to acute diseases.
- However, sometimes, a disease lasting for a period of 3 three months is considered a chronic illness.
- The term 'terminal' disease is used for diseases that are chronic with high chances of ending with death because there are no effective medications available against them.

- Chronic diseases tend to be more severe as they progress, which occurs over a period of months and most years.
- Chronic diseases also affect multiple systems in the body and are not always fully responsive to treatments.
- Chronic conditions are often associated with noncommunicable diseases as the causes are mostly noninfectious.
- Most of these diseases are not caused by an infectious agent and are often caused due to poor lifestyle or health choices.
- These are caused due to unhealthy behavioral and eating habits persisting for an extended period of time.
- Some chronic diseases might have a period of remissions or relapse during where the disease might be temporarily absent.
- The risk factors associated with chronic diseases are different for different diseases, but some of the common risk factors include dietary, lifestyle, and metabolic factors.
- The severity of most chronic diseases is not fulminant. However, patients with chronic conditions become prone to acquiring fatal acute diseases.
- Because treatment is mostly not effective against chronic disease, prevention is considered to be more advantageous.
- This can be achieved by regular screening for the existence of predisposing factors which helps in early detection, severely reducing the harmful outcomes.

## Key Differences (Acute Disease vs. Chronic Disease)

Basis for comparison	Acute diseases	Chronic diseases
Definition	Acute disease is a condition or a disorder that comes on or onsets rapidly and lasts for a shorter period of time.	Chronic disease is a condition or a disorder that persists for a longer period of time or has long-lasting health effects.
Appearance	Acute diseases mostly appear suddenly.	The onset of chronic diseases is more
Timespan	Acute diseases last for a shorter time as compared to chronic diseases.	Chronic diseases last for a longer period of time. Some might even be life- long.
Causes	Infections by foreign agents cause most acute conditions. Some diseases might even appear due to accidents and misuse of medication.	Causes of chronic diseases are not always certain but an unhealthy lifestyle and diet often cause these diseases.

Basis for comparison	Acute diseases	Chronic diseases
Nature	Most acute diseases are communicable and are caused by an infectious agent.	Most chronic diseases are non- communicable as no infectious agent is associated with the disease.
Effects	Acute diseases do not have harmful health effects.	Because chronic diseases last for a longer time, it causes long-term effects on the health of the patient.
Relapse	There are no periods of relapse during the disease as the time span is shorter.	There might be multiple periods of relapse during the disease.
Onset of Symptoms	Symptoms associated with acute diseases appear suddenly and worsen over a short period.	Symptoms of chronic diseases might not appear for a very long period of time.
Symptoms	Symptoms of acute diseases differ according to the nature of the disease.	Symptoms of chronic diseases might overlap, and the common symptoms like weight loss and shortness of breath might be seen in most chronic diseases.
Diagnosis	Accurate diagnostic tests are available for many acute diseases.	Accurate diagnosis tests are not available for many chronic diseases.

Basis for comparison	Acute diseases	Chronic diseases
Treatment	Acute diseases can be cured completely with the administration of appropriate dosages of drugs.	Chronic diseases are rarely cured with medicines. Most medications available for chronic diseases only functions to keep the disease from getting worse. Early detection of the disease might help reduce severe outcomes.
Prevention	Different prevention steps can be followed for acute diseases. The prevention might defer with the nature of the disease.	Developing better behavioral, lifestyle, and dietary habits can be employed to prevent chronic diseases. Some acute conditions might progress to become chronic, so proper treatment of acute diseases is also a method of prevention.
Examples	Typhoid, Jaundice, Bone fracture, Burns, Heart attack, Cholera, etc.	Diabetes, Cancer, Tuberculosis, Arthritis, etc.

## **Examples of Acute Diseases**



- Typhoid is an acute disease that is caused as a result of an infection of a bacterium, Salmonella Typhi.
- The incubation period of typhoid ranges from 8 days to 1 month, and the disease might last up to a month.
- Typhoid is commonly transmitted by the ingestion of water and food contaminated with an infected person's feces.
- The symptoms appear within days and mostly include high fever and diarrhea.
- The symptoms are less severe even though the severity might differ with the immune condition of the patients.
- Typhoid can be detected via diagnostic tests like Widal test, serology, and immunoassays.
- It is possible to cure the disease by the ingestion of appropriate drugs for a time allocated by the doctor.
- Typhoid can be prevented by keeping a healthy diet and maintaining proper sanitation.

(Bone Fracture)

- A bone fracture is an acute condition where the continuity of a bone is broken, or some cracks are formed in the bone.
- Bone fractures are commonly caused due to stress or tension and might be common in patients with weakened bones.
- There are different types of bone fractures, including avulsion, comminuted, and hairline fractures.
- Most bone fractures are associated with some sort of accident.
- These fractures can be diagnosed with radiological examination of the bones that ensure the extent and nature of the bone fracture.
- Bone healing is a natural process, and the treatment associated with it is to provide an optimal condition for the bone to heal by itself.

## **Examples of Chronic Diseases**



- Diabetes is a chronic condition where the glucose level or sugar level of the blood is higher than normal.
- Diabetes is of two types.
- Type 1 Diabetes occurs when the body's immunity system destroys the body's own healthy cells like the insulinproducing beta cells in the pancreas, mistaking them for foreign invaders.
- Type 2 diabetes occurs when the body is unable to use the produced insulin effectively, which causes an increase in blood glucose levels.
- Symptoms of diabetes are not apparent and usually appear gradually over a period of time. By the time the symptoms appear, complications might be seen in the disease.
- Diabetes is mostly seen in older men and is associated with unhealthy dietary habits.
- There is no cure for the disease, but medications are available that control the complications of the disease.

(Cancer)

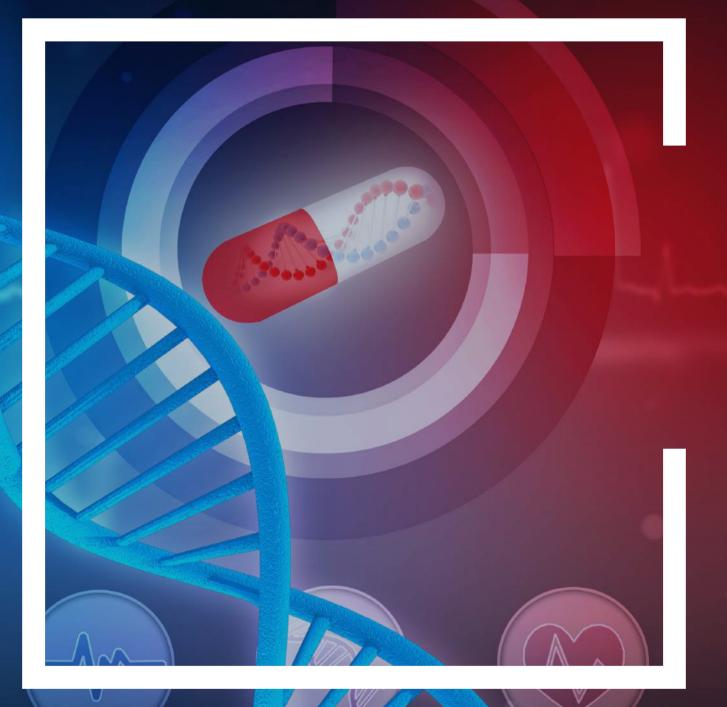
- Cancer is a chronic condition that consists of a number of diseases caused due to uncontrolled division of cells with the potential of spreading to different parts of the body.
- The most common causes of cancer are tobacco use, obesity, poor diet, lack of physical exercise, and intake of alcohol.
- Some cancer might be caused due to the genetic condition of the patient.
- Symptoms like a lump, abnormal bleeding, rapid weight loss, and prolonged cough might appear in many cancers. These symptoms might even have other causes.
- The most important diagnostic test for cancer is the biopsy, where a part of the tissue is examined for the detection of cancerous cells.
- As in the case of most chronic diseases, maintaining a proper diet with regular exercise can be employed as preventive measures for cancer.

#### **References and Sources**

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