

Human Diseases: A Systemic Approach, 8e (Zelman)

Chapter 1 Introduction to Disease

1.1 Multiple-Choice Questions

1) In _____, the body's organ systems normally maintain temperature, pH, blood composition, and fluid levels within a precise range.

- A) disease
- B) health
- C) homeostasis
- D) pathology

Answer: C

Objective 1

2) _____ is a deviation from normal structure or function in the body that interrupts or modifies the performance of vital functions.

- A) Disease
- B) Health
- C) Homeostasis
- D) Pathology

Answer: A

Objective 1

3) A disease that causes no signs or symptoms is called an _____ disease.

- A) asymptomatic
- B) disorder
- C) prognosis
- D) syndrome

Answer: A

Objective 1

4) _____ is the process of identifying a disease or disorder.

- A) Acute
- B) Chronic
- C) Diagnosis
- D) Prognosis

Answer: C

Objective 1

5) _____ refers to a visual examination of the external surface of the body, its movements, and posture for abnormalities or evidence of disease.

- A) Auscultation
- B) Inspection
- C) Palpation
- D) Percussion

Answer: B

Objective 1

6) _____, producing sounds by tapping on specific areas of the body with fingers, hands, or small instruments, allows evaluation of the size, consistency, and borders of the body organs, and the presence or absence of fluid in body areas.

- A) Auscultation
- B) Inspection
- C) Palpation
- D) Percussion

Answer: D

Objective 1

7) _____ uses computers and x-rays to create three-dimensional images of internal structures.

- A) Computed tomography

B) Nuclear medicine

C) Radiography

D) Ultrasound

Answer: A

Objective 1

8) _____ analyzes the interaction of low-frequency sound waves with tissues to create moving images of internal organs.

A) Computed tomography

B) Nuclear medicine

C) Radiography

D) Ultrasound

Answer: D

Objective 1

9) _____ uses radioactive materials to create contrast in the body and help form images of the structure and function of organs.

A) Computed tomography

B) Nuclear medicine

C) Radiography

D) Ultrasound

Answer: B

Objective 1

10) The predicted course and outcome of the disease is known as the _____.

A) diagnosis

B) exacerbation

C) prognosis

D) relapse

Answer: C

Objective 1

11) A disease that will end in death is called a _____ disease.

- A) chronic
- B) exacerbation
- C) palliative
- D) terminal

Answer: D

Objective 1

12) Examples of _____ diseases include heart disease, cancer, stroke, diabetes, and arthritis.

- A) acute
- B) chronic
- C) exacerbation
- D) terminal

Answer: B

Objective 1

13) Some diseases enter a period of _____ during which signs and symptoms subside or disappear.

- A) exacerbation
- B) relapse
- C) remission
- D) sequela

Answer: C

Objective 1

14) A period of _____ occurs when signs and symptoms grow more severe.

- A) complication

- B) exacerbation
- C) relapse
- D) remission

Answer: B

Objective 1

15) An example of a _____ is a person confined to bed with a serious fracture developing pneumonia due to inactivity.

- A) complication
- B) relapse
- C) remission
- D) sequela

Answer: A

Objective 1

16) An example of a _____ is rheumatic fever causing permanent damage to the heart.

- A) complication
- B) relapse
- C) remission
- D) sequela

Answer: D

Objective 1

17) _____ is the number of deaths that occur among people with a certain disease.

- A) Incidence
- B) Morbidity
- C) Mortality
- D) Prevalence

Answer: C

Objective 1

18) _____ is the number of cases of a disease in a population.

- A) Incidence
- B) Morbidity
- C) Mortality
- D) Prevalence

Answer: B

Objective 1

19) _____ is the percentage of a population that is affected with a particular disease at a given time.

- A) Incidence
- B) Morbidity
- C) Mortality
- D) Prevalence

Answer: D

Objective 1

20) _____ data allows the determination of the impact and significance of a disease for a given population.

- A) Incidence
- B) Morbidity
- C) Mortality
- D) Prevalence

Answer: D

Objective 1

21) The _____ is the chief epidemiologic institution in the United States.

- A) American Medical Association

- B) Centers for Disease Control and Prevention
- C) Department of Health and Human Services
- D) World Health Organization

Answer: B

Objective 4

22) An important aspect of any disease is its _____, or cause.

- A) etiology
- B) idiopathic
- C) pathogenesis
- D) sequela

Answer: A

Objective 2

23) _____ describes how the cause of a disease leads to anatomical and physiological changes in the body that ultimately result in the disease.

- A) Etiology
- B) Idiopathic
- C) Pathogenesis
- D) Sequela

Answer: C

Objective 2

24) Disease caused by an abnormality in an individual's genes or chromosomes.

- A) congenital
- B) hereditary
- C) metabolic
- D) nutritional

Answer: B

Objective 2

25) In _____ diseases, the function or structure of the affected tissue or organs progressively deteriorates over time.

- A) congenital
- B) degenerative
- C) inflammatory
- D) traumatic

Answer: B

Objective 2

26) _____ diseases are caused by a disruption of the normal processes of converting food to energy on a cellular level.

- A) Congenital
- B) Degenerative
- C) Metabolic
- D) Traumatic

Answer: C

Objective 2

27) By eliminating known _____ for a disease, a person may reduce the chance of developing that disease.

- A) categories
- B) etiology
- C) risk factors
- D) sequela

Answer: C

Objective 3

28) More than 75% of U.S. healthcare dollars go to treatment of _____ diseases instead of prevention, even though prevention would yield a significant reduction in healthcare costs.

- A) acute
- B) chronic
- C) exacerbation
- D) sequela

Answer: B

Objective 4

29) Treatment aims to _____ a disease or reduce the severity of its signs and symptoms.

- A) cure
- B) exacerbate
- C) prevent
- D) relapse

Answer: A

Objective 4

30) The goal of _____ treatment is to provide comfort and relieve pain.

- A) curative
- B) modifiable
- C) palliative
- D) preventable

Answer: C

Objective 4

1.2 True/False Questions

1) A significant disturbance in the homeostasis of the body leads to disease.

Answer: True

Objective 2

2) The study of disease includes study of its causes, mechanisms, signs and symptoms, treatments, and prevention.

Answer: True

Objective 1

3) A disease can be recognized through its characteristic signs and symptoms.

Answer: True

Objective 2

4) Symptoms are evidence of disease, observed on physical examination.

Answer: False

Objective 2

5) A disorder is an abnormal structure or function characterized by a group of signs and symptoms that usually occur together.

Answer: False

Objective 2

6) Signs and symptoms are measures of various physiological statistics in order to assess the most basic body functions, and vary with age, sex, weight, exercise tolerance, and physical condition.

Answer: False

Objective 3

7) The prognosis may state the chances for complete recovery, predict the permanent loss of function, or give probability of survival.

Answer: True

Objective 1

8) A chronic disease has a sudden onset and short duration.

Answer: False

Objective 1

9) A remission may last days, months, or years, after which the disease can recur.

Answer: True

Objective 1

10) A relapse describes the return of a disease weeks or months after its apparent cure.

Answer: True

Objective 1

11) A complication is a related disease or other abnormal state that develops in a person already suffering from a disease.

Answer: True

Objective 1

12) The Centers for Disease Control and Prevention acts as a coordinating authority on international public health.

Answer: False

Objective 4

13) Congenital diseases can be acquired through heredity or acquired during development in the uterus.

Answer: True

Objective 2

14) Inflammatory, autoimmune, and allergic diseases are the result of abnormal immune function.

Answer: True

Objective 2

15) Equivalent to etiology, risk factors increase a person's chance of developing a disease?

Answer: False

Objective 2

1.3 Short-Answer Questions

1) _____ is the condition in which the human body performs its vital functions normally.

Answer: Health

Objective 1

2) Health depends on the body maintaining _____, relatively stable internal conditions under fluctuating environmental conditions.

Answer: homeostasis

Objective 1

3) _____ is the study of disease, especially the structural and functional changes associated with disease.

Answer: Pathology

Objective 1

4) A _____ is a physician who studies and interprets the changes caused by disease.

Answer: pathologist

Objective 1

5) _____ are indications of disease reported by the patient, such as pain, dizziness, and itching.

Answer: Symptoms

Objective 1

6) A _____ is a functional abnormality not necessarily linked to a specific cause or physical abnormality.

Answer: disorder

Objective 1

7) _____, feeling the body with fingers or hands, allows examination of the size, consistency, texture, location, and tenderness of an organ or body part.

Answer: Palpation

Objective 1

8) _____, listening to the lungs, heart, and intestines, allows evaluation of the frequency, intensity, duration, number, and quality of sounds originating in the body.

Answer: Auscultation

Objective 1

9) An _____ reads the heart's electrical impulses.

Answer: electrocardiography

Objective 1

10) A _____ disease has a slower, less severe onset and a long duration of months or years.

Answer: chronic

Objective 1

11) The aftermath of a particular disease is called the _____.

Answer: sequela

Objective 1

12) _____ is the study of the occurrence, transmission, distribution, and control of disease.

Answer: Epidemiology

Objective 1

13) If the cause of a disease is not known, it is said to be _____.

Answer: idiopathic

Objective 1

14) Infectious diseases are caused by _____, like bacteria and viruses.

Answer: pathogens

Objective 1

15) _____ diseases result from abnormal growth that leads to the formation of tumors.

Answer: Neoplastic

Objective 1

1.4 Case Study

1) Lind Hunt is a 75-year-old woman who went to see her doctor because she has chest pain, difficulty breathing, a cough, and a fever. The doctor hears crackling sounds in her chest when she breathes and an x-ray reveals that her lungs are filled with fluid. The doctor says that Linda has pneumonia and prescribes antibiotics. After 5 days Linda's chest feels better, her fever subsides, and she can breathe easier.

1. Name the symptoms the doctor used to determine a diagnosis.
2. Name the signs the doctor used to determine a diagnosis.
3. Is this disease hereditary, inflammatory, infectious, or neoplastic?

Answer:

1. Symptoms are subjective manifestations of disease. In this case, the symptoms include chest pain, difficulty breathing, and cough.

Objective 1

2. Signs are objective manifestations of the disease. In this case, signs include the x-ray results, crackling sounds in the lungs, and fever.

Objective 1

3. Pneumonia is an infectious disease often caused by bacteria. If it is determined to be caused by bacteria, then the pneumonia will be treated with antibiotics.

Objective 2

1.5 Discussion Questions

1. Explain the difference between signs and symptoms and give some examples of each.

Answer: Signs are evidence of disease observed on physical examination, such as an abnormal pulse, abnormal respiratory rate, fever, and sweating. Symptoms are indications of disease reported by the patient, such as pain, dizziness, and itching.

2. Explain the difference between syndromes and disorders.

Answer: A syndrome is an abnormal structure or function characterized by a group of signs and symptoms that usually occur together. A disorder is a functional abnormality not necessarily linked to a specific cause or physical abnormality.

3. There are five physical examination procedures. Pick two and describe them.

Answer:

1. Inspection refers to a visual examination of the external surface of the body, its movements, and posture for abnormalities or evidence of disease.
2. Palpation, feeling the body with fingers or hands, allows examination of the size, consistency, texture, location, and tenderness of an organ or body part.
3. Auscultation, listening to the lungs, heart, and intestines, allows evaluation of the frequency, intensity, duration, number, and quality of sounds originating in the body.
4. Percussion, producing sounds by tapping on specific areas of the body with fingers, hands, or small instruments, allows evaluation of the size, consistency, and borders of the body organs, and the presence or absence of fluid in the body area.
5. Vital signs (pulse, respiratory rate, blood pressure, temperature) are measures of various physiological statistics in order to assess the most basic body functions. Normal vital signs vary with age, sex, weight, exercise tolerance, and physical condition.

4. Explain the difference between a CT scan and an MRI.

Answer: Computed tomography (CT scan) uses computers and x-rays to create three-dimensional images of internal structures. Magnetic Resonance Imaging (MRI) analyzes tissue responses to a strong magnetic field to create images of internal structures.

5. Explain the difference between diagnosis and prognosis.

Answer: Diagnosis is the process of identifying a disease or disorder. Prognosis is the predicted outcome of the disease.

6. Explain the difference between mortality and morbidity.

Answer: Morbidity is the number of deaths that occur among people with a certain disease. Mortality is the number of cases of a disease in a population.

7. There are nine chief causes of disease. Describe three giving an example for each.

Answer:

1. Hereditary - caused by an abnormality in an individual's genes or chromosomes. [Hemophilia, sickle cell anemia, cystic fibrosis]
2. Congenital - exists at date of birth, can be acquired through hereditary or acquired during development in the uterus. [Tetralogy of Fallot]
3. Degenerative - the function or structure of the affected tissues or organs progressively deteriorates over time. [Arteriosclerosis, osteoarthritis, Alzheimer's]
4. Inflammatory, autoimmune, and allergic - result of abnormal immune function. [Asthma, systemic lupus erythematosus, hay fever]
5. Infectious diseases are caused by pathogens like bacteria and viruses. [Tuberculosis, influenza, syphilis]
6. Neoplastic - result from abnormal growth that leads to the formation of tumors. [Lung cancer, malignant melanoma, breast cancer]

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7. Metabolic - disruption of normal metabolism, the process of converting food to energy on a cellular level. [Diabetes, hypothyroidism, gigantism]
8. Traumatic - physical or chemical injury. [Burns, frostbite, bone fractures]
9. Nutritional - related to overconsumption or underconsumption of nutrients. [Iron-deficiency anemia, scurvy, obesity]