Meaning of Disease

A disease is any harmful deviation from the normal structural or functional state of an organism, generally associated with certain signs and symptoms and differing in nature from physical injury.

Types of disease

1. Communicable disease. 2. Non- Communicable disease

Other types of disease

- 3. Inherited disease. 4. Degenerative disease
- 5. Mental illness. 6. Social disease
- 7. Eating disorder. 8. Deficiency disease
- The description of the diseases

Mode of transfer of the Diseases

Diseases can be transfer through

- 1. Direct Transmission
- 2. Indirect Transmission
 - A Disease Vector

A vector is a carrier of disease causing agent from an infected individual to a non- infected individual or it's food or environment

Examples of vector and diseases they transmitted

Vector	Diseases it transfer
Mosquito	Malaria, yellow fever, dengue fever
Tsetse fly	Sleeping sickness
Tick	Typhus, Lyme Disease
Black fly	River blindness
Housefly	Typhoid, cholera, dysentery

Topic: Family Health

Life cycle of mosquito and other vector

The mosquito has four stages in it's lifecycle.Adults lays eggs in stagnant water. The eggs develop into larvae and then pupae. Adult mosquito emerge from the pupae.

Lifecycle of the Housefly

The lifecycle of the Housefly.Eggs are laid in damp, dark place such as compost manure and other decomposing organic matter.

Lifestyle of Bilharzia worm

The lifecycle of a Bilharzia worm are laid in water and most formed in human body. Enter into human skin and shed their forked tail forming schostomula . The schostosomula migrate throughout the body's tissue through blood circulation.

Week 3.

Family health

- Control measures of vector Borne Diseases
- 1. Elimination or management of larvae habitat
- 2. Larviciding with insecticide
- 3. Use of biological agent or adulticides
- 4. Use of mosquito repellant creams, coils, liquids etc.
- Control measures for STIs

Sexually transmitted infections are transmitted from one person another during unprotected sexual contact.etc

Prevention of Sexually Transmission infection

Ways to prevent sexually transmitted infections are:

- sexual education and counseling
- Use of condoms both male and female
- Education in how to recognise early symptoms
- Consequences of contacting HIV
- significant weight loss
- hair loss
- Often accompanied by diarrhoea
- often accompanied by chronic weakness and fever

Care and support for people living with HIV/AIDS

- 1. Support them physically by listening to their needs
- 2. Encourage them to start HIV treatment as soon as possible
- 3. Encourage the patient to love a healthy lifestyle
- 4. Support them to provide balance and nutritious meal. etc

Pathogens Diseases and Prevention

Meaning of pathogens

Pathogens can be defined as the micro organisms that can cause infections in the human body.

Meaning of Prevention

Prevention is any action taken to keep people healthy, well and avoid risk of poor health, illness, injury and early death

Types of Pathogen

- 1. Bacteria
- 2. Fungi
- 3. Viruses
- 4. Rickettsiae
- 5. Worms
- 6. Protozoa

Diseases caused by Pathogen

- 1. Malaria fever is caused by plasmodium
- 2. Typhoid fever is caused by salmonella typhi
- 3. Cholera is caused by vibrio cholera
- 4 . Gonorrhoea is caused by Gonococcus
- 5. Tuberculosis is caused by Mycobacterium
- 6. Smallpox is caused by the Variola virus
- 7. Poliomyelitis is caused by picornavirus
- 8. Leprosy is caused by Mycobacteriumlepri
- 9. River blindness is caused by Onchocera

Topic: Pathogens Diseases and there Preventions

Nature of communicable disease

The term NCDs refers to a group of conditions that are not mainly caused by an acute infection, result in long term health consequences and often create a need for long term treatment and care.thrse conditions include cancers, cardiovascular diseases, diabetes and chronic lung illness

Symptoms of Communicable Diseases

The symptoms of communicable diseases can vary depending on the type of infection and the affected body system. Some diseases, like the flu, have distinct symptoms that make them easy to identify. However, other diseases may have more general symptoms that can be difficult to distinguish from other illnesses.

Some common symptoms of communicable diseases include:

Fever Coughing Sore throat Runny nose Body aches Headache Nausea and vomiting Diarrhea Fatigue

Keep in mind that not all people infected with a communicable disease will exhibit symptoms. This is especially true for individuals with a weak immune system, such as young children, elderly individuals, and those with chronic illnesses.

Ways disease can spread

As mentioned earlier, communicable diseases can spread through different modes of transmission. The most common modes of transmission include:

Direct contact: This includes skin-to-skin contact, kissing, and sexual contact.

Indirect contact: This occurs when a person comes in contact with a contaminated object, such as a doorknob, and then touches their face.

Airborne transmission: This happens when an infected person coughs, sneezes, or talks, releasing respiratory droplets into the air that are then inhaled by others.

Vector-borne transmission: This occurs when a disease is transmitted by insects or animals, such as malaria and Lyme disease.

Prevention of Communicable Diseases

Mode of transmission of communicable diseases

In this topic, we will discuss how communicable diseases, also known as infectious diseases, are spread from person to person.

MODE OF TRANSMISSION OF COMMUNICABLE DISEASES

There are four main modes of transmission of communicable diseases: direct contact, indirect contact, airborne, and vector-borne.

- Direct contact refers to the spread of a disease through direct physical contact, such as touching, kissing, or sexual contact. Examples of diseases that can be spread through direct contact include HIV, Ebola, and influenza.

- Indirect contact refers to the spread of a disease through indirect physical contact, such as touching contaminated objects or surfaces. For example, someone can become infected with a cold or flu by touching a doorknob or keyboard that has been touched by an infected person.

- Airborne transmission occurs when infectious particles, such as droplets from a sneeze or cough, are inhaled by another person. This mode of transmission is common for respiratory diseases, such as tuberculosis, measles, and COVID-19.

- Vector-borne transmission refers to the spread of diseases through the bites of insects or animals that carry the disease-causing microorganisms. Examples of vector-borne diseases include malaria, Lyme disease, and dengue fever.

Factors of Disease

There are several factors that can contribute to the development of a disease. These can be broadly categorized into four main categories:

1. Environmental factors: These are external factors that can impact our health. This includes air pollution, water contamination, and exposure to harmful substances.

2. Lifestyle factors: Our lifestyle plays a crucial role in our overall health. Eating unhealthy food, lack of exercise, and smoking are some of the factors that can lead to diseases.

3. Genetic factors: Some diseases are hereditary, meaning they can be passed down from parents to children. This is why it is important to know your family's medical history and take necessary precautions.

4. Infectious agents: These are microorganisms that cause diseases. Bacteria, viruses, and fungi are examples of infectious agents that can lead to illnessesm

Causative Agents

Causative agents are the types of pathogens that cause specific diseases. For example, the causative agent for tuberculosis is the bacterium Mycobacterium tuberculosis, while the causative agent for the flu is the influenza virus.

PREVENTION AND MANAGEMENT OF COMMUNICABLE DISEASES

The best way to prevent the spread of communicable diseases is by practicing good hygiene habits. This includes:

- 1. Washing your hands frequently with soap and water.
- 2. Covering your mouth and nose when coughing or sneezing.
- 3. Avoiding close contact with people who are sick.
- 4. Disinfecting frequently touched surfaces.
- 5. Getting vaccinated against diseases for which vaccines are available.

Environmental hazards

Environmental hazards refer to threats or risks posed by elements within an environment that can harm the health of living things. These hazards can occur naturally or be caused by human activities. In this note, we will discuss the meaning of environmental hazards and the various types that exist. We will also examine their impact on both human and physical components of the environment.

Types of Environmental Hazards

There are several types of environmental hazards, and each poses its own unique threat to living things. Some of the common types include:

-Air pollution -Water pollution -Soil pollution -Deforestation -Climate change -Waste pollution -Noise pollution -Radiation -Biodiversity loss -Land degradation Meaning of soil erosion

Soil erosion can be described as the process of moving soil from one place to another. It may sound simple, but it has a major impact on the environment and our activities on the land.

Causes of Soil Erosion

There are various factors that contribute to soil erosion, including:

-Natural forces such as wind, water, ice, and gravity

-Human activities such as deforestation, overgrazing, and construction

-Inadequate soil management practices

Effects of Soil Erosion

Soil erosion has many negative effects, some of which include:

1.Loss of soil nutrients: as the top layer of soil is eroded, it takes away essential nutrients that plants need to grow.

2. Reduced water quality: eroded soil can pollute water sources, making it unsafe for human and animal consumption.

3. Increased flooding: without the protective layer of topsoil, water can easily flood and damage crops, homes, and infrastructure.

4. Desertification: when soil erosion becomes severe, it can lead to the creation of desert-like conditions, making it difficult for plants to grow.

Preventing Soil Erosion

Soil erosion can be prevented through various methods, such as:

- Planting cover crops and vegetation to hold the soil in place.

- Terracing or contour plowing to slow down the flow of water and prevent it from carrying away soil.

- Reducing human activities that contribute to erosion, like overgrazing and deforestation.

Meaning of flooding

Flooding is a natural disaster that occurs when a large amount of water overflows and submerges land that is usually dry. This can happen due to heavy rainfall, overflowing rivers, or even high tide. Floods can happen in any part of the world, and they can cause significant damage to natural habitats, buildings, and people's livelihoods.

Causes of Flooding

1. Extreme weather: Heavy rainfall, cyclones, and hurricanes can result in floods by causing rivers and lakes to overflow.

2. Overflowing rivers and lakes: Rivers and lakes may overflow their banks after heavy rainfall or snowmelt. This can be caused by a combination of numerous factors, such as poor land and river management, which may alter the natural flow of the water.

3. Poor drainage systems: When drainage systems are clogged or overflowing, water cannot flow through them properly and may end up flooding the area.

4. Deforestation: Trees play an essential role in absorbing water and reducing runoff, but when trees are cut down for construction or agriculture, the land is left exposed, which can lead to flooding.

5. Urbanization: Rapid and unplanned urbanization can increase the risk of flooding because it involves replacing the land's natural vegetation with non-absorbent materials like concrete and asphalt.

6. Climate change: Climate change is altering weather patterns, leading to more severe and more frequent storms and floods

DRAINAGE PATTERNS

The drainage pattern refers to how water travels around a landscape. This might not sound very interesting, but I assure you, dear students, you will be amazed by the different shapes water takes as it flows through land.

There are four main types of drainage:

Dendritic, 2.Rectangular

3. Radial, 4. Trellis.

These patterns are determined by the geology of the land and the slope of the region.

Dendritic patterns look like the branches of a tree, with tributaries merging into a main river. These patterns are a common sight, as they form in areas with gently sloping terrain and uniform rock structures. Next, we have the Rectangular patterns that usually form in places with angular and perpendicular joints and streams that follow underlying fault lines.

The Radial pattern is streams and rivers that flow outward from a single central ridge or peak. These patterns are most common in volcanoes or mountains.

The Trellis patterns is where tributaries flow into the main river at regular intervals, resembling a garden trellis

Effects of Flooding

Flooding can have a number of negative effects on both humans and the environment. Here are some of the most common effects of flooding:

1. Property damage: The most obvious effect of flooding is that it can damage homes, buildings, and other structures. This can result in expensive repairs and also result in the loss of personal belongings.

2. Crop damage: Flooding can also cause damage to crops in agricultural areas, ruining a farmer's livelihood.

3. Spread of disease: Flooding can increase the spread of waterborne diseases as it contaminates water sources.

4. Displacement: In severe cases, flooding can cause people to be displaced from their homes, forcing them to seek shelter elsewhere and disrupting their lives.

5. Erosion: Flooding can cause erosion, washing away soil and altering land features. This can be dangerous to both humans and the environment.

Prevention of Flooding

To prevent flooding, humans can take a number of measures. Some of these include:

1. Planting trees: Planting trees along riverbanks can help reduce the risk of flooding by stabilizing the soil and absorbing excess water.

2. Building levees and dams: These structures help to control the flow of water in flood-prone areas, reducing the risk of flooding.

3. Monitoring climate change: As climate change can lead to more frequent extreme weather events, monitoring and addressing climate change is crucial in preventing flooding.

4.Disaster preparedness: Individuals and communities should be prepared for the possibility of flooding by having emergency supplies, creating evacuation plans, and knowing how to shut off utilities.

Drugs and substances abuse

Drugs are chemicals that change the way our body and brain function. Some common examples of drugs are alcohol, caffeine, and nicotine. Substances are materials or substances that are used to create drugs.

Types of drugs

1.Stimulants Stimulants are drugs that increase brain activity, resulting in a surge of energy and alertness. Examples of stimulants include cocaine, amphetamines, and caffeine. When abused, stimulants can cause increased heart rate, elevated blood pressure, and irregular heartbeats. They can also lead to feelings of paranoia and aggression, and in some cases, even psychosis. Long-term use of stimulants can result in severe health problems, such as heart attack and stroke.

2. Depressants Depressants are drugs that slow down brain activity, resulting in a feeling of relaxation and calmness. Examples of depressants include alcohol, barbiturates, and benzodiazepines. When abused, depressants can cause a loss of coordination, impaired memory, and difficulty thinking and making decisions. They can also lead to slowed heart rate and breathing, which can be fatal. Chronic use of depressants can result in addiction and withdrawal symptoms, such as anxiety and tremors.

3. Hallucinogens Hallucinogens are drugs that alter perception, causing people to see and hear things that are not there. Examples of hallucinogens include LSD, psilocybin, and peyote. When abused, hallucinogens can cause intense and unpredictable psychological effects, such as hallucinations, anxiety, and paranoia. They can also result in physical effects, such as increased heart rate, high blood pressure, and loss of coordination. In some cases, long-term use of hallucinogens can cause persistent psychosis and flashbacks even after the drug has left the body.

Drugs that can be abused

Drug abuse is the harmful use of substances, including drugs and alcohol, for non-medical purposes. This can lead to addiction, health problems, and even death. Let's explore the different types of drug abuse and substances that can be abused.

A. Amphetamines: These are stimulant drugs that increase energy and alertness, but also cause dangerous side effects like heart problems and mental illness.

B. Cocaine: This is a highly addictive stimulant drug that can cause severe health issues, including heart disease, brain damage, and even death.

C. Opioids: These painkillers can be very addictive and dangerous when misused. They can also cause respiratory problems and fatal overdoses.

D. Marijuana: This is the most commonly abused drug worldwide, and can cause negative effects on the brain, heart, and respiratory system.

E. Alcohol: While it might seem harmless, alcohol is actually a psychoactive drug that can cause addiction, liver damage, and other serious health issues.

F. Prescription drugs: When used without a doctor's supervision, these medications can be just as dangerous as illegal drugs.

Effects of Drugs Abuse

Drugs abuse can cause various physical and psychological effects on the individual. These effects can include:

- 1. Changes in brain chemistry, leading to addiction
- 2. Cardiovascular problems, such as heart attacks and strokes
- 3. Respiratory problems, such as lung cancer and emphysema
- 4. Liver and kidney damage
- 5. Mental health issues, such as depression, anxiety, and psychosis

Consequences of Drugs Abuse

Apart from the physical and mental health effects, drugs abuse can also lead to other consequences, such as:

Legal troubles, such as arrests and imprisonment

Problems in school or work, including poor academic or job performance

Damaged relationships with family and friends

Financial issues due to spending money on drugs

Prevention of Drugs Abuse

It is important to prevent drugs abuse before it starts. Some ways to do this include:

Educating people, especially young people, about the dangers of drugs abuse Encouraging healthy coping mechanisms for stress and emotional issues Building strong support systems for individuals at risk of drugs abuse Having strict laws and consequences for drug-related offenses

Drug control agencies and their activities

1.National Agency for Food, Drug Administration and Control (NAFDAC)

NAFDAC is the agency responsible for regulating and controlling the manufacture, importation, exportation, advertisement, distribution, sale, and use of food, drugs, cosmetics, medical devices, and chemicals in Nigeria. It was created in 1993 to safeguard the health of the Nigerian population by ensuring that only safe, effective, and wholesome products are made available to the public. NAFDAC carries out its activities through various departments and units, such as the Registration and Regulatory Affairs Department, Pharmacovigilance and Post-Marketing Surveillance Department, and Laboratory Services Department.

2.National Drug Law Enforcement Agency (NDLEA)

The National Drug Law Enforcement Agency was established in 1989 to combat drug trafficking and the abuse of controlled substances in Nigeria. Its primary responsibility is to arrest and prosecute drug traffickers, seize and destroy illicit drugs, and educate the public on the dangers of drug abuse. The NDLEA also works with international organizations, such as the United Nations Office on Drugs and Crime, to strengthen drug control efforts.

3. National Agency for the Prohibition of Trafficking in Persons (NAPTIP)

NAPTIP was established in 2003 to combat the trafficking of persons for the purpose of exploitation and other forms of human trafficking. This agency works closely with law enforcement agencies, border authorities, and NGOs to rescue and rehabilitate victims of human trafficking and prosecute perpetrators. NAPTIP also engages in public education and awareness campaigns to prevent human trafficking and protect potential victims.

They play a crucial role in minimizing the harm caused by drugs to individuals, communities, and the nation as a whole. These agencies prevent the spread of harmful and counterfeit drugs, curb drug trafficking, and reduce drug-related violence and crime.

Taekwondo

Taekwondo is a Korean martial art that focuses on speed, agility and power. It is a popular form of self-defense and also a competitive sport. In this lesson, we will explore the basics of Taekwondo and its benefits.

Origins of Taekwondo

Taekwondo originated in Korea over 2000 years ago. Its development was heavily influenced by the Korean military and traditional Korean martial arts. In Korean, "tae" means foot, "kwon" means fist, and "do" means way of life - thus Taekwondo is the way of using your hands and feet for self-defense.

Basic Techniques in taekwondo

There are a variety of techniques used in Taekwondo, including punches, kicks, and blocks. Here are some of the basic techniques you need to know:

1. Front Kick: Standing in your fighting stance, raise your knee to your waist and then extend your leg straight forward to kick your target.

2. Roundhouse Kick: In your fighting stance, pivot on your support foot and use the momentum to swing your kicking leg towards your opponent in a circular motion.

3. Palm Strike: With a clenched fist, use the base of your palm to strike your target with a quick and forceful movement.

4. High Block: Raise your arms up in front of your face with your hands open and facing outwards. This block is used to protect your upper body from high attacks.

Benefits of Taekwondo

Taekwondo has numerous physical and mental health benefits.

- 1. It helps improve muscle strength
- 2. It improves flexibility
- 3. It promote balance
- 4. It also promotes discipline, focus, and self-confidence.

With regular practice, Taekwondo can help students stay physically active and develop important life skills that will benefit them both on and off the mat.

Remember, the key to mastering Taekwondo is to practice consistently and with determination. Keep challenging yourself and set goals, and you will see progress in no time!

Importance of taekwondo

Physical Fitness

Self-Defense Skills

Mental and Emotional Benefits

Healthy Lifestyle

Basic rules and regulations in taekwondo

Some basic safety rules in taekwondo include

- 1. wearing appropriate protective gear,
- 2. staying hydrated during practice,
- 3. Always warming up properly to avoid injuries.
- 4. Listen to your instructor and follow their instructions carefully to prevent accidents.

Officials in taekwondo and their duties

officials in taekwondo who are responsible for enforcing these rules and ensuring the fairness of the sport.

- 1. The referee who oversees the match,
- 2. The judges who score the athletes' performances,
- 3. The timekeeper who keeps track of the match's duration.

Apart from the main officials mentioned above, there are also other key officials in taekwondo, including:

- Medical personnel

Medical personnel are present at taekwondo tournaments to provide immediate medical assistance in case of injuries.

- Competition Manager

The competition manager is responsible for coordinating all aspects of the tournament, including scheduling, logistics, and ensuring compliance with rules and regulations.

- Technical Delegate

The technical delegate is appointed by the World Taekwondo Federation to ensure that the tournament follows international standards and regulations.

- Scoring Machine Operator

The scoring machine operator is responsible for controlling the electronic scoring system used in taekwondo tournaments.

Meaning of Boxing

Boxing is a combat sport that involves two participants, known as boxers, who throw punches at each other to score points. It requires a combination of strength, speed, agility, and strategy to outsmart your opponent and win.

Basic Techniques in boxing

1. Stance

The stance is the foundation of boxing. It's the position from which you throw your punches. Start by standing with your feet shoulder-width apart, left foot slightly in front of the right for right-handed people (vice versa for left-handed people). Keep your knees slightly bent, your body balanced, and your hands up to protect your face.

2. Jab

The jab is the most frequently used punch in boxing. It is a quick and straight punch thrown with your lead hand (left hand for right-handed people and vice versa). Keep your lead hand close to your face and extend it quickly towards your target, then bring it back to your face just as quickly.

The cross is a straight punch thrown with your rear hand. It's a powerful punch that follows the jab and is thrown from the same side as your back foot. As you throw the cross, rotate your hips and shoulders to generate more power.

4. Hook

The hook is a quarter-circle punch thrown with your lead hand. Bend your arm at a 90-degree angle and then swing it in a circular motion towards your target. This punch is great for attacking the sides of your opponent's head or ribs.

5. Uppercut

The uppercut is a punch thrown from a lower position and aimed upwards towards your opponent's chin. To throw an uppercut, bend your knees and raise your rear arm in an arc towards your target.

Safety rules and regulations in boxing

1. Protective Gear Boxing is a full-contact sport,

2. Medical Clearance Before an athlete is allowed to enter the ring, they must undergo a medical evaluation to ensure that they are physically fit to compete

3. Matching Athletes To ensure a fair and competitive match, athletes are matched based on factors such as weight, height, age, and gender.

4. No Strikes to the Back of the Head or Spine In a boxing match, athletes are not allowed to hit their opponent on the back of the head or the spine.

5.;No Strikes Below the Belt Strikes below the belt are strictly prohibited in boxing, as it can cause significant damage to the groin area.

6.Limited Rounds Boxing matches are split into rounds, and the number of rounds is determined by the athlete's age and experience level.

7. Medical Personnel on Standby In case of any injuries or medical emergencies, there must be qualified medical personnel present at the boxing match to provide immediate medical attention to the injured athlete.

Officials In Boxing And Their Duties

1. **The Referee**: The referee is the head official in a boxing match and has the ultimate authority to enforce the rules and make decisions during the fight. Their main duty is to ensure the safety of the boxers. The referee's decision is final and cannot be appealed against.

2. **Judges:**The judges are responsible for scoring the fight and declaring the winner based on their scorecards. There are usually three judges in a professional boxing match, and their scores

are added up to determine the winner. The judges also have the power to stop the fight if they believe a fighter is severely injured or not able to continue.

3. **Timekeeper**: The timekeeper is responsible for keeping track of the rounds and the overall time of the fight. They start and stop the clock for each round and also indicate when there are 10 seconds left in the round. If a fighter is knocked down, the timekeeper starts a countdown for the knocked down fighter to get up and continue the fight.

4. **Ringside doctor**: The timekeeper is responsible for keeping track of the rounds and the overall time of the fight. They start and stop the clock for each round and also indicate when there are 10 seconds left in the round. If a fighter is knocked down, the timekeeper starts a countdown for the knocked down fighter to get up and continue the fight.