**Final-Term Assignment**

 **DPT 6th semester**

**Course Title: Teaching Methodology and community medicine**

**Instructor: Dr. M. Shahzeb khan (PT)**

 **Marks: 50**

**Note:**

**Attempt all questions, all questions carry equal marks.**

**Q1:** (A) What is difference between Prevention, Control, Elimination and Eradication? Explain with Example

(B) Write down different stages of Health Education

**ANSWER)**

**(PART A) DIFFERENCE**

* **PREVENTION:-**

It is the act of stopping something harmful or we can say that the action through which we can stay away from a disease to occur is called as prevention. Pursuing the least damage also comes under the heading of prevention.

EXAMPLE:

As a precautionary measure of COVID-19 we need to wash our hands more frequently to prevent the occurrence or recurrence of this disease.

* **CONTROL:-**

The consistent purposeful measures and acts taken in accordance to decrease the speed of spreading of a disease, Its frequency, recurrence and prevalence is called as the control.

EXAMPLE:

In case of any infectious disease we need to avoid the direct contact with the person having it in order to control the transmission of the infection.

* **ELIMINATION:-**

To stop the occurrence of a certain disease in a specific area of the globe by the consistent measures that involve certain interventions and efforts. It is not global but in a specified area.

EXAMPLE:

Poliomyelitis, HIV and measles are the examples of elimination that are still endemic in many specific regions of the globe whereas at many regions it is eliminated.

* **ERADICATION:-**

To permanently stop the occurrence of a certain diseases throughout the globe by the consistent measures that involve certain interventions and efforts. When we say that the disease is eradicated, that means that there are no new cases of the disease anymore worldwide.

EXAMPLE:

Two infectious diseases have successfully been eradicated: smallpox and rinderpest (An infectious disease in ruminants that is; goat sheep cow).

(PART B)

**HEALTH EDUCATION:**

Definition: The process of the provision of the information, motivation to help the people in the endorsement of the maintenance of a healthy lifestyle that involves a support of research trainings in achieving this goal.

**STAGES OF HEALTH EDUCATION:**

1. **Sensitization**

Through effective and beneficial message people are sensitized with the arising issue.

1. **Publicity**

By the help of all the commercial and promotion means people are given with information with respective issue.

1. **Education**

Health education is provided by any influential personality in the community to the illiterate people or to those who are least interested so that it may help in the getting rid of the issue.

1. **Attitude change**

By the help of health education it moves the minds of the people positively that results in the change of the attitude helping them in achieving good health.

1. **Motivation & action**

Inducing the people for the betterment of their health makes people able to motivate their families and themselves in the right actions for their own good being and good health.

1. **Social change**

It is the stage of the transformation of the community into a healthy community after all the stated stages are done.

**Q2:** What is Ethics? Write down Types and Principals of Ethics.

**ANSWER)**

**ETHICS**

**DEFINITION:**

Set of moral principles having good and bad behaviour of an individual affecting the decision taking abilities of the persons to lead their lives.

**EXPLANATION:**

* Ethics and morality can be used interchangeably an there is no any problem that it can be used in the casual conversations as they almost have got the same meanings.
* They differ in meanings in Philosophical studies.
* Ethics and moral both are related to the wrong and right behaviours.
* Ethics are the set of rules given to a subject by an outer source.

TYPES OF ETHICS:

1. Medical Ethics.
2. Health care Ethics.
3. Bioethics.
4. Clinical medical ethics.

**PRINCIPLES OF ETHICS**

Confliction cannot be avoided. The set of ethics and its tools enable the society and the individual to deal with the conflict fairly and in an unjust manner.

1. **AUTONOMY:**
* Respect the right of a person in making his decisions.
* Teaching the people to make choices by their own.
* Aid people in making their solely choices.
* No need to induce people forcefully to do things.
* The important consent is the expression of the willingness.
1. **BENEFICENCE:**
* The target is to provide benefits to the people in welfare, comfort. Health, well being and the improvement of life.
* The term what is benefit should be defined by the people themselves because what seems important to us doesn’t mean that it will be beneficial for them as well.
* Stop the damage.
1. **NON MELIFICENCE:**
* Do not cause; harm , damage , ache or sufferings.
* Do not kill them.
* Do not make people deprive of anything.
1. **JUSTICE:**
* Fair treatment with the people.
* No discrimination.
* Respect law and the rights of the people.
* Share the resources with the people fairly.
* No favour to one party over another.
1. **NUREMBERG CODE:**
* After the world war 2 it developed.
* It involves, informed consent, absence of coercion and beneficence towards study participants.
* The integral part is the voluntary consent of human.
* The fruitful results are expected by the experiments for the sake of society.
* Experiments should be based on the results after being performed over animals and the information of the history of the disease.
* Conduction of the experiments should be out of any sufferings and harm either physical or mental.
* Accountability of the risk is important.
* Conduction of the experiments should be done by the well qualified professionals and not by the assistants.
* The scientific in charge will be allowed to abandon the experiment anytime.

**Q3:** What are Genetic Abnormalities? Write down different types of Genetic Abnormalities

ANSWER)

**GENETICS:**

**Definitions;** The study of the transmission of the hereditary characters from one generation to the other is called as the genetics.

**EXPLANATION:**

The odd functional gene when is transferred into the offspring causes abnormalities and illness. Some people inherit certain diseases like diabetes and cancer from parents.

**GENETIC ABNORMALITIES:-**

Every gene has its own specific function. When any sort of disruption takes place in the gene it causes mutation and results in the different abnormalities, health problems. It can be caused by a mutation in a single gene (monogenic) or multiple genes (polygenic) or by a chromosomal abnormality. They may be inherited from the parent or may occur with no family history. Can be;

* Chromosome abnormalities
* Single-gene defect
* **CHROMOSOME ABNORMALITY:**

These are the most common:-

1. **ANEUPLOIDY:** More or few number of chromosomes despite of the normal number. EXAMPLES ARE;
* Down’s Syndrome: When a person has extra chromosomes. In this syndrome chromosome 21st has 3 copies.
* Turners Syndrome: When one of the X chromosome is missing partially or wholly. In females mostly.
1. **Deletion**: when a segment of a chromosome is missing.
2. **Inversion**: When a chromosomes attaches its pieces again after it is broken.
3. **Ring**: When a piece of chromosome attaches itself in a manner to form a ring.
4. **Translocation**: When a piece of chromosome rearranges from one location to another. It can happen either within the same chromosome or move to another chromosome.
5. **Mosaicism**: Presence of an extra chromosome in the genetic material of a male or female.
* **SINGLE GENE DEFECT:**

Single gene defect can be: Dominant, Recessive, X.linked.

DOMINANT: When one gene is abnormal only from one of the parent.

RECESSIVE: When both the parents are carrying abnormal genes.

X.LINKED: Gene on X chromosome determine the disorder.

**Q4**: (A) What is Diabetes? Write down different types of Diabetes mellitus

 (B) What is Difference between Diabetes Mellitus and Diabetes Insipidus?

 (C) How will you prevent yourself from Diabetes Mellitus

ANSWER)

**PART A**

**DIABETES:**

It is a chronic disease in which a patient’s pancreas is unable to produce enough of the insulin which the hormone for the regulation of the sugar level of the blood. And the body cannot consume the produced insulin that the body is providing.

WHO defines diabetes as Diabetes as Fasting Blood Glucose more than 126 mg/dl on one single occasion.

**TYPES OF DIABETES MELLITUS:**

1. **TYPE 1:** It is insulin dependent type that requires daily administration of the insulin. The cause of this type is not known.

**Symptoms include;**

* Excessive excretion of urine.
* thirst
* Continuous hunger,
* Loss of weight
* vision changes
* Tiring feeling.
1. **TYPE 2:** it is insulin independent. Occurs due to the inefficient use of the body insulin. 90 percent of the people are suffering from this type.

**Symptoms include;**

* Similar to those of Type 1 diabetes but marked often.
* As a result, the disease may be diagnosed several years after onset after the complications have elevated
* This type of diabetes was seen only in adults but it is now also occurring in children.

**PART B**

**Difference between diabetes mellitus and insipidus**

1. Diabetes mellitus is sugar diabetes while insipidus is water diabetes.
2. Sweet urine in mellitus while bland pale urine in insipidus.
3. Insulin from pancreas in mellitus while vasopressin in insipidus.
4. There are many causes to mellitus while insipidus may be genetic.
5. Cause from pancreas while insipidus causes have got from pituitary gland.

**PART C**

**PREVENTION:**

 **Prevention of diabetes mellitus**:

* reduce body weight or maintaining a healthy or normal body weight, as excessive weight can cause more risks of diabetes
* Uses of healthy vegetables and fruits
* Daily exercise or running to be physically fit.
* Reduce or avoid consumption of alcohol and tobacco

these were primary prevention.

In secondary preventions we have to diagnose disease On time and to start treatment early

Diagnosis occur Via blood tests.

**Q5:** (A) What is Mental Disorder? Write different types of Mental Disorder

 (B) Why we need Health Information System? Explain it

ANSWER) **PART A**

**Mental disorders**:

A psychological or behavioral problem that can lead to stress or mental problems, irrational thoughts or even suicide.

**Types**:

**Anxiety disorders**: anxiety means fear of future, people with such condition face fear all the time and nervousness in certain condition, the signs are fast breathing or sweating

**Eating disorders**: most of people with mental illness have irregular eating Pattern that is they would eat in fast way or un necessary easting pattern

This can lead to weight Problems

**Mood disorders**: mood disorder is most common now a days, in this condition mood swings rapidly i.e from extreme happiness into sadness.

**Psychotic disorders**: in this condition irrational thoughts occurs to the person

Hallucination and delusions are the main facts of this condition.

**Impulse control or addiction disorders**:

In this condition a person can not resist himself of harmful things, smoking and drugs intake is the main example of this condition.

**Personality disorders**:

Personality disorders most commonly occur in teenagers, as in this stage most of them wanted to be better then others regarding status, level or fashion etc.

**Adjustment disorders**: when a person shifts into a stressful environment, it become difficult to adjust with that environment

For example when a person start job in a new place.

**Dissociative disorders**: people with this condition suffers with disturbance or memory changes, consciousness and general awareness of themselves and their surroundings.

**PART B)**

Why we use health information system:

The purpose of Health IT is to provide better care for patients and help achieve health equity.

Health IT improves the quality of healthcare delivery, increases patient safety, decreases medical errors, and strengthens the interaction between patients and healthcare providers.

What is a Health Information System?

A health information system (HIS) refers to a system designed to manage healthcare data. This includes systems that collect, store, manage and transmit a patient’s electronic medical record (EMR), a hospital’s operational management or a system supporting healthcare policy decisions.

Health information systems also include those systems that handle data related to the activities of providers and health organizations. As an integrated effort, these may be leveraged to improve patient outcomes, inform research, and influence policy-making and decision-making. Because health information systems commonly access, process, or maintain large volumes of sensitive data, security is a primary concern.

Health information technology (HIT) involves the development of health information systems.

**EXAMPLES OF HEALTH INFORMATION SYSTEMS**

Health information systems can be used by everyone in healthcare from patients to clinicians to public health officials. They collect data and compile it in a way that can be used to make healthcare decisions.