**Final-Term Assignment**

**DPT 8th semester**

**Course Title: Hospital Management And Bioentrepreneurship**

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

**Marks: 50**

**Note:**

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

**Q1:** (A) What is difference between Public, Community and Population Health?

(B) What is difference between Impairment, Handicap and Disability? Explain with Example

**Q2:** (A) How will you make Health Planning for Common Health problem in your community?

**Q3:** What are characteristics of an Accountable organization? Write down at least ten.

**Q4:** What is Medical Audit? Why we need to do Medical Audit? Write down at least ten reason

**Q5:** What is Hospital Information system (HIS)? Write down Aims and Benefits of HIS

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**Q1: Difference between community, public, population.**

**Population Health**:

* The simplest definition of population health is the health outcome of a group of individuals.
* “Population” describes a patient population with a similar characteristic. But that characteristic can vary: age, geographic, similar diagnosis, employees of the same company, disabled persons, or groups based on When talking about population health, we are describing health and healthcare outcomes that impact a specific group of people being tracked and managed for specified health conditions.
* For example, chronic diseases, such as heart disease and diabetes, that disproportionately affect specified population African Americans.”
* socioeconomic status or ethnicity are all examples of populations.
* Public health works to protect and improve the health of communities through policy recommendations, health education and outreach, and research for disease detection and injury prevention.
* It can be defined as what “we as a society do collectively to assure the conditions in which people can be healthy”
* population health as an interdisciplinary, customizable approach that allows health departments to connect practice to policy for change to happen locally.
* This approach utilizes non-traditional partnerships among different sectors of the community – public health, industry, academia, health care, local government entities, etc.

**COMMUNITY HEALTH:**

* Community Health shares similarities with both population health and public health but tends to be more strictly geographically based.
* Community health is often seen as a field within public health, focusing on the health of a particular population group that has common characteristics, such as culture, work, physical traits, geography or other demographics.
* This important subsection of public health includes initiatives to help community members maintain and improve their health, prevent the spread of infectious diseases and prepare for natural disasters.
* Working at the community level promotes healthy living, helps prevent chronic diseases and brings the greatest health benefits to the greatest number of people in need.
* It’s not just about the healthcare system, but focuses on the importance of leading a generally healthy lifestyle in order to protect the community as a whole.
* Community health is inextricably tied to individual wellness.
* Good community health equates to healthy people, as a community is the ecosystem or environment in which people live

**Public Health**:

* The WHO defines public health broadly as ‘all organized measures (whether public or private) to prevent disease,
* promote health and prolong life among the population as a whole.
* CDC Foundation defines public health as being ‘concerned with protecting the health of entire populations.
* Science of protecting the safety and improving the health of communities through education, policy making and research for disease and injury prevention.
* public health try to prevent people from getting sick or injured in the first place
* promote wellness by encouraging healthy behaviours
* The people in the field of public health work to assure the conditions in which people can be healthy. That can mean vaccinating children and adults to prevent the spread of disease.
* Or educating people about the risks of alcohol and tobacco. Public health sets safety standards to protect workers and develops school nutrition programs to ensure kids have access to healthy food.
* Public health works to track disease outbreaks, prevent injuries and shed light on why some of us are more likely to suffer from poor health than others.
* The many facets of public health include speaking out for laws that promote smoke-free indoor air and seatbelts, spreading the word about ways to stay healthy and giving science-based solutions to problems.

**Difference between impairment, handicap, disability:**

**Impairment**

any loss or abnormality of psychological, physiological or anatomical structure or function.

**Disability**

any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being.

**Handicap:**

 impairment refers to a problem with a structure or organ of the body; disability is a functional limitation with regard to a particular activity; and handicap refers to a disadvantage in filling a role in life relative to a peer group.

**CP example**

David is a 4-yr.-old who has a form of cerebral palsy (CP) called spastic diplegia. David's CP causes his legs to be stiff, tight, and difficult to move. He cannot stand or walk.

**Impairment**

The inability to move the legs easily at the joints and inability to bear weight on the feet is an impairment. Without orthotics and surgery to release abnormally contracted muscles, David's level of impairment may increase as imbalanced muscle contraction over a period of time can cause hip dislocation and deformed bone growth. No treatment may be currently available to lessen David's impairment.

**Disability**

David's inability to walk is a disability. His level of disability can be improved with physical therapy and special equipment. For example, if he learns to use a walker, with braces, his level of disability will improve considerably.

**Handicap**

David's cerebral palsy is handicapping to the extent that it prevents him from fulfilling a normal role at home, in preschool, and in the community. His level of handicap has been only very mild in the early years as he has been well-supported to be able to play with other children, interact normally with family members and participate fully in family and community activities. As he gets older, his handicap will increase where certain sports and physical activities are considered "normal" activities for children of the same age. He has little handicap in his preschool classroom, though he needs some assistance to move about the classroom and from one activity to another outside the classroom. Appropriate services and equipment can reduce the extent to which cerebral palsy prevents David from fulfilling a normal role in the home, school and community as he grows.

**LD example:**

Cindy is an 8-year-old who has extreme difficulty with reading (severe dyslexia). She has good vision and hearing and scores well on tests of intelligence. She went to an excellent preschool and several different special reading programs have been tried since early in kindergarten.

**Impairment**

While no brain injury or malformation has been identified, some impairment is presumed to exist in how Cindy's brain puts together visual and auditory information. The impairment may be inability to associate sounds with symbols, for example.

**Disability**

In Cindy's case, the inability to read is a disability. The disability can probably be improved by trying different teaching methods and using those that seem most effective with Cindy. If the impairment can be explained, it may be possible to dramatically improve the disability by using a method of teaching that does not require skills that are impaired (That is, if the difficulty involves learning sounds for letters, a sight-reading approach can improve her level of disability).

**Handicap**

Cindy already experiences a handicap as compared with other children in her class at school, and she may fail third grade. Her condition will become more handicapping as she gets older if an effective approach is not found to improve her reading or to teach her to compensate for her reading difficulties. Even if the level of disability stays severe (that is, she never learns to read well), this will be less handicapping if she learns to tape lectures and "read" books on audiotapes. Using such approaches, even in elementary school, can prevent her reading disability from interfering with her progress in other academic areas (increasing her handicap)

**Q2:** (A) How will you make Health Planning for Common Health problem in your community?

* A plan is defined as a map, as preparation, as an arrangement.
* Planning defines where one wants to go, how to get there and the timetable for the journey.

**Health planning:**

* Health Planning involves all steps taken to identify common health problems.
* This also involves establishing goals and objectives and preparation of action plans to achieve objectives.

**Types of plan:**

* **Strategic plan**
* Outlines the direction an organization is intending to follow, with broad guidance. What?
* **Operational Plan** timing, methods & implementation - HOW?
* **Short time plan** that covers less than one year
* **Long time plan** – that extend beyond five years
* **Macro plan -** National level
* **Micro plan-** Regional or district level

**Health planning cycle:**

**Situation health analysis:**

* Population affected by disease, age, sex distribution
* Number afflicted, number died
* Person, time and place distribution
* Medical care facilities available both private and public
* Health personnel's available
* Training facilities available
* Beliefs of population towards disease.

Identify goals and obejctives:

Goals:

* E.g. Improve maternal health

**Objectives**

* Reduce MMR by three quarter up till 2020
* Increase skilled birth delivery by 90% up till 2020

**Assessment of resources:**

* Human Resources (Health personnel available) e.g. doctors, lab technicians etc.
* Physical resources e.g. equipments
* Funds available for the purpose.

**Implementation:**

Following issues must be addressed:

1. What is to be done?

2. How that has to be done?

3 . By whom ?

4 . To whom?

**Monitoring and evaluation:**

* **Monitoring**
  + Day to day follow up of activities to ensure that they are proceeding as planned.

**Evaluation**

It is the process of determining the degree to which objectives have been achieved i.e. reduction in mortality, morbidity etc

**Q3:** What are characteristics of an Accountable organization? Write down at least ten.

* Accountability is when an individual or department is held responsible for the performance of a specific function. OR
* Accountability is the obligation or willingness to accept responsibility for one’s actions. To be accountable means to be answerable for one’s actions and be liable for their consequences.
* Essentially, they are liable for the correct execution of a particular task, even if they may not be the one performing the task.
* Other parties rely on the task to be completed, and the accountable party is the party whose head will roll if the action is not carried out. Accountability is common in the financial arena and in the business world as a whole.
* Accountability is one of those golden concepts that no one can be against. It is increasingly used in political discourse and policy documents because it conveys an image of transparency and trustworthiness.

**Characteristics of accountable organization:**

1. Clear vision and priorities
2. Shared Ownership: Shared accountability for all top priorities.
3. Effective Execution: Linking people and processes to achieve high performance.
4. Relentless Attack of Dysfunctional Habits: Accountable leaders make a point to surface and address these habits and develop new and effective behavior.
5. Surface and Resolve Problems and Conflicts: No one should feel afraid to be punished or terminated from their position. Focus on where the problem lies
6. Proactive Recovery – Accountable organizations realize that successful people make mistakes and learn from their experiences. - Create recovery plans for mistakes. - When perfection is in demand people tend to cover their errors and create larger catastrophes.
7. Measure Performance Execution
8. Recognize Success!! Ensure people feel a sense of accomplishment.

**Q4:** What is Medical Audit? Why we need to do Medical Audit? Write down at least ten reason

**Medical audit:**

* Audit in healthcare is a process used by health professionals to assess, evaluate and improve care of patients in a systematic way. Audit measures current practice against a defined (desired) standard. It forms part of clinical governance, which aims to safeguard a high quality of clinical care for patients. Or
* Medical Audit is defined as “the evaluation of medical care in retrospect through analysis of medical records.”
* Objectively monitor and evaluate the clinical performance of all practitionors
* Which identify opportunities for improvement
* Provide mechanism through which action is taken to make and substain those improvements.

**Ten reason of medical audit:**

1.  it identified and promotes good practice and can lead to improvements in service delivery and outcomes for users
2.  Can provide the information we need to show other that our service is effective and thus ensure its development.
3.  provides opportunities for training and education
4.  helps to ensure better use of resources and so, increased efficiency
5.  can improve working relationships, communication and liaison between staff, and services users , and between agencies
6.  To ensure the best possible care for patients
7.  To ensure clinical practice is evidence-based
8.  Audit in integral part of the clinical governance
9.  Assist with the implementation of national initiatives
10.  To improve working b/w multi-disciplinary group

**Q5:** What is Hospital Information system (HIS)? Write down Aims and Benefits of HIS

Hospital information system:

* HIS is a comprehensive, integrated information system designed to manage all the aspects of a hospital's operation, such as medical, administrative, financial, and legal issues and the corresponding processing of services.
* Hospital information system is also known as **hospital management software** (**HMS**) or **hospital management system**.
* (Or) A Hospital Information System is essentially a computer system that can manage all the information to allow health care providers to do their jobs effectively. It is also known as Healthcare Information System.
* a **hospital information system** refers to a set of applications designed to manage healthcare data. It acts as a centralized database whereby all the **information** related to patients, doctors, and staff is collected and stored.
* It also includes systems that handle data related to the hospital’ operational management or healthcare policy decisions.
* And since the hospital information system handles such a large volume of sensitive data, security is always its primary concern.

**Aim of hospital information system:**

* the aim of a hospital information system is to achieve the best possible support of patient care and administration by electronic data processing.
* The HIS may control organizations, which is Hospital in these case, official documentations, financial situation reports, personal data, utilities and stock amounts, also keeps in secure place patients information, patients medical history, prescriptions, operations and laboratory test results.
* The HIS may protect organizations, handwriting error, overstock problems, conflict of scheduling personnel, official documentation errors like tax preparations errors.
* The **purpose** of the **hospital information system** is managing the employee and patient activities remotely with immediate access for the authorized users. ... As for the medical specialists, the healthcare record **management system** that contains the patient **information** in one place enables more efficient work of the staff.
* As you know, an information system simply automates data and information gathering, processing, dissemination and storage. Therefore for a hospital information system, its goals would include capturing hospital information and history. Hospital history like a history of any organization refers to all information and data in the database of the organization. This includes patient details, doctors details, capturing transactions within the hospital, ward assignment, making bookings, and many many functions. The system will also process payments of the various workers.
* The Hospital information system has multiple components. There is a clinical component for patient records, a lab system, financial system, usually a maintenance component, radiology component, pharmacy, biomedical and personnel. There may be other systems linked to it. The goal is accurate, efficient and secure record keeping, billing, and other operations of the hospital.

**Benefits of hospital information system:**

* The benefits of using Hospital Information System are:

1. Improved quality of patient care.
2. It helps as a decision support system for the hospital authorities for developing comprehensive health care policies.
3. Efficient and accurate administration of finance, diet of patient, engineering, and distribution of medical aid. It helps to view a broad picture of hospital growth.
4. Improved monitoring of drug usage, and study of effectiveness.
5. Improved quality of documentation**.**

**A) Physicians:**

* Introduces Computerized Provider Order Entry (CPOE) (refers to the process of a medical professional entering and sending medication orders and treatment instructions electronically via a computer application instead of on paper charts)
* Improves clinicians’ efficiency & effectiveness through provision of key patient information (e.g., allergies) at time of ordering.
* Reduces medication error rates

**B) Nurses:**

Will allow immediate access to orders and results Will provide immediate access to patient demographics, medication and test results.

Will decrease the need for paper, decrease errors and increase patient safety

**C) Ward and Registration Clerks :**

Will provide a single point of contact for patient registration information and reduce duplication of effort.

* D) Administrative Benefits :
* Will provide improved access to information
* Will decrease the need for paper, decrease errors and increase patient safety.
* Will decrease the need for re-registrations of patients across multiple sites.