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Lectures in Community Medicine For 4th Stage Students By **Dr. Hassan Baiee** 2010 – 2011

Lecture 23 **Epidemiology of Mental Health**

Throughout the world there is an increasing awareness of mental disorder as a significant cause of morbidity.

This awareness has increased with the study decline of morbidity due to nutritional disorders, infectious diseases and other forms of physical illness. There is also a better understanding of certain behavioral and social problems which had previously not been properly recognized as manifestations of mental disorders.

Dimensions of the problem:

Mental and behavioral disorders affecting more than 25% of people at some time during their lives. They are also universal, affecting people of all countries and societies. Individuals at all ages, women and men, the rich and the poor, from rural and urban environments. They have an economic impact on societies and on the quality of life of individuals and families.

The importance of neuropsychiatric disorders was underestimated when health problems were ranked solely on their contribution to mortality rates.

Classification of mental disorders:

- 1- Impaired intelligence; arrested or incomplete development of the mind.
- 2- Psychosis; manic depressive psychosis and schizophrenia or organic psychosis to lesion in the brain.
- 3- Psychopathic disorders; aggressive antisocial acts.
- 4- Behavioral disorders; delinquency and maladjustment.
- 5- Social Breakdown Syndrome SBS: inability of the ill person to cope with environment, it is a self limiting disorder but if the cause still present it changes to other psychological manifestations.

Determinants of mental disorders:

- 1- Poverty
- 2- Unemployment
- 3- Low education
- 4- Conflict and civil strife
- 5- Disasters (Post Traumatic Stress Disorders PTSD).
- 6- Major physical diseases (HIV, HBS Ag, Cancers, etc...)
- 7- Broken family / problem family
- 8- Major life events

Some prevalence rates of various disorders

•	Organic disorders	0.4%
•	Psychoactive substance use	6.9%
•	Psychotic disorders	2.7%
•	Mood, stress, anxiety disorders	12.3 - 20.7%
•	Personality disorders	2-10%
•	Development disorders	4.2%
•	Childhood disorders	16.5%

Host Factors:

Age: high prevalence is noted in 35-44 year age group.

Sex: more in females

<u>Marital status:</u> commonly seen in divorced nuclear family members. <u>Socioeconomic factor:</u> more common in low socioeconomic group. Heredity: genetic influence is strong in the causation of mental illness.

Environmental factors:

<u>Toxic substances:</u> lead, mercury, manganese toxicity, etc...

<u>Drugs:</u> barbiturates, alcohol

Nutritional factors: deficiency of thiamine, pyridoxine, iodine, etc...

<u>Infections:</u> prenatal, perinatal, postnatal (Rubella, Measles, etc...)

Accidents: such as Road Traffic Accidents (RTA), Occupational, or domestic accidents.

Radiation: during the period of neural development.

Prevention of mental disorders:

The objectives of mental health program are to ensure for each individual of an optimal development of mental abilities and satisfactory emotional adjustment to his environment, this can be achieved at three levels

1- Primary 2- Secondary 3- Tertiary

Primary Prevention measures:

- 1- Aimed at the community level.
- 2- Provide healthy social environment.
- 3- Improvement of social factors.

Health promotion: Slum clearance, up liftment, foster placement services, refuge welfare, detection of antenatal infection.

Premarital genetic counseling, prevention of consanguineous marriage especially if congenital mental disease runs in this family, prevention of pregnancy for old mothers, prevention of birth trauma to brain, prevention of malnutrition, prevention of drug abuse, prevention of stress as environmental stress is an important factor precipitating mental disorders, This can be done by making balance between work and leisure time and prevent excess fatigue. Counseling service for family life to resolve conflicts in relation to family or self or community.

Specific immunization such as (Rubella).

Secondary prevention:

Involves *early diagnosis* and *proper treatment* of mental disorders for example early detection and treatment of phenylketonuria, hypothyroidism, etc...

Success of early detection and treatment depend on;

- 1- Support of family physician.
- 2- Support and understanding of the family.
- 3- Community support.
- 4- Health facilities for detection.

Methods adopted:

- 1- Early screening programs (Schools, Universities, Industry, etc...)
- 2- family based health services
- 3- Case work or counseling: involves identification of problems, early symptoms of mental illness and help to cope with stress in the individual as well as the family level.

Tertiary prevention:

Steps involve:

- 1- Rehabilitation: finding new job coping with patient condition. Handicapping clubs or special schools for children.
- 2- Individual/group psychotherapy.
- 3- Mental health education.
- 4- Use of modern psychotropic drugs.
- 5- After medical care services.

Control of Mental Disorders:

Mentally ill person should not be isolated in hospital for long time. Public education and consciousness to mental disorders is vital because the ill person needs special handling and treatment from his family, friends, and community.

Emotional security is vital item in treatment.