MODULE

Common Mental Illnesses

For the Ethiopian Health Center Team

Ethiopia Public Health
Training Initiative

Alemayehu Gelmessa, Fethi Mohamed, M.D.; Seyoum Mengistu, M.D.;
Yezina Temesgen, M.D.; Nega Baraki

Haramaya University

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List of contributors

The following teaching staff members of Alemaya University, Faculty of Health Sciences have contributed to the completion of this module.

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- Ato Solomon Tassew
- Ato Nega Assefa

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UNIT ONE

INTRODUCTION

1.1. Purpose and use of the module

This module is intended to serve as a general learning material about Common mental illnesses for the health center team: Health officer (HO), environmental health technician (EHT), public health nurse (PHN), medical laboratory technician (MLT) and the community health worker (CHW). The basic and general concepts about the illnesses, their public health significance, the causation, epidemiology, clinical features, management, and the strategies for prevention and control are discussed in simple and quite understandable ways.

The module can also be used by other categories of health professionals. Moreover, it can also be used as a reference material for professionals working in health centers. This material may also be used as a learning material in training workshops, and seminars for members of the health center team, community health workers and caregivers. However, it should be noted that it is not a substitute for standard textbooks.

1.2. Directions for using the module

Before starting to read this module, please follow the directions given below. Considering various factors, it was decided that there is no need of satellite module and pretests for MLT and EHT

- Go through all the contents of the core module by starting with the pre-test.
- Use a separate sheet of paper to write your answers and label it "pre-test answers".
- The pre - test has two portions, part I and part II.

Part I: Contains common questions to be answered by all categories of the health center team.

Part II: The questions are prepared for the specific categories; health officer, public health nurse; select and do the portion indicated for your specific category.

- When you are sure that you are through with the core module, proceed to read the satellite module corresponding to your profession or interest.
- Evaluate yourself using the post-test after you have read the modules completely (the core and the specific satellite).
- Go through the task analysis for the health center team members in comparison with that of your own.

Note: You may refer to the list of abbreviations and glossary at the end of the module for terms that are not clear.

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UNIT TWO

CORE MODULE

2.1.Pre - test

Answer the following questions on a separate answer sheet.

2.1.1. Part I: Pre - test for all categories of the health center team

Write “True” or “False” for questions 1-5, the letter of choice for questions 6-10 and write short answers for the questions 11-15.

1. Mental illness is not a public health problem in Ethiopia.
2. Once an individual is labeled as a mentally ill patient, he/she is no more use to the community.
3. There are medical remedies for mental illnesses.
4. Mental illness is caused by evil sprits.
5. Mental hospitals are places where only dangerous mentally ill people are treated.
6. Which of the following is not a component of primary health care (PHC) program?
    A. Expanded Program on Immunization (EPI)
    B. Maternal and Child Health (MCH)
    C. Mental illness
    D. All except C
    E. None
7. Which of the following is not true about the clinical features of a mental illness?
    A. Have diverse signs and symptoms.
    B. They should be grouped together to make diagnosis.
    C. The symptoms should be persistent and intense.
    D. A single symptom is enough to make a diagnosis.
    E. None of the above.

8. Which of the following is not true about mental illness?
    A. It is something about which to be ashamed
    B. It is incurable
    C. It is contagious
    D. It can be cured by marriage
    E. All of the above
9. Which of the following is not the treatment modality in mental illness?
    A. Witchcraft
    B. Occupational therapy
    C. Drugs
    D. Electro-convulsion therapy
    E. None of the above
10. If you detect a patient with mental illness in the community, what should be your immediate action?
    A. Advise relatives or caretakers to first try with traditional healers.
    B. Reassure the patient or relatives that the illness can resolve by itself.
    C. Advise relatives or caretaker to take the patient to a health institution.
    D. Advise relatives or caretakers to take the patient to holy water.
    E. None of the above
11. Define mental illness.
12. Define Psychiatric emergencies.
13. List at least five main clinical features of mental illness.
14. List some of the primary prevention measures of mental illness.
15. List at least four etiologic factors for mental illness.

Part II: Questions specific to a category of the health center team

A. For health officers

Answer the following questions

1. Which of the following is /are primarily generalized type(s) of seizure?
    A. Absence or petit mal seizure
    B. Tonic - clonic or grand mal seizure
    C. Atonic seizure
    D. Myoclonic seizure
    E. All of the above
2. Which one of the following is the most important to diagnose epilepsy?
    A. Detailed history
    B. Physical examination
    C. Laboratory investigation
    D. X - ray of the skull
    E. All are equally important
3. The first thing that should be done for a patient who comes with seizure is
    A. Draw blood for laboratory investigation
    B. Send the patient to higher center
    C. Check the vital signs and correct if there is a problem.
    D. Do a neurological examination.
    E. None of the above

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4. Which of the following is true?
    A. Knowledge about the type of seizure does not influence choice of drugs
    B. Antiepileptic drugs should be started in patients with recurrent seizures due to unknown cause.
    C. It is better if the initial management contains two drugs regimen.
    D. Once a person is put on anti epileptic, then the treatment is always for life.
    E. All of the above
5. Which of the following drugs is not used for tonic clonic type of seizure?
    A. Phenytoin
    B. Phenobarbital
    C. Carbamazepine
    D. Ethosuximide
    E. None of the above
6. Which of the following is not true about Major Depressive Disorder (MDD) and bipolar disorder?
    A. To diagnose MDD, major depressive episodes are needed without manic or hypomanic episodes.
    B. In bipolar II, patient has one MDE and one manic episode.
    C. In bipolar I, patient has one manic episode with or without MDE or hypomanic episodes.
    D. Symptoms of MDD should last a minimum of 2 weeks.
    E. None of the above

7. Which of the following is not true about the different anxiety disorders?
    A. Generalized anxiety disorder can be treated best with benzodiazepines, antidepressants and cognitive behavioral therapy.
    B. Panic disorder has the best prognosis if treated properly.
    C. The difference between post traumatic stress disorder and acute stress disorder is only a matter of time.
    D. Specific phobias (like height phobia) can be treated with desensitization.
    E. Psychological treatment for anxiety disorder has better out comes than pharmacological ones.
8. Which of the following is true about causes of schizophrenia?
    A. Exact cause is not identified
    B. It could be hereditary
    C. May be due to abnormal biochemical levels in the brain
    D. Psychosocial stressors may be responsible in precipitation
    E. All of the above
9. Which of the following is true about the course of schizophrenia?
    A. Prodromal symptoms may last over a year before overt signs of psychosis.
    B. Positive symptoms get worse with time while the negative symptoms get improve.
    C. Suicide is attempted in 10% of patents.
    D. Relapse rate is 80% with medication.
    E. None of the above.
10. Febrile seizure is an important cause of seizure in young adults.
    A. True B. False
11. Idiopathic epilepsy generally begins in early years of life.
    A. True B. False

12. Laboratory investigations are not necessary in patients with seizure at all.
    A. True B. False
13. Depression has a better prognosis than mania.
    A. True B. False
14. Lithium is the first line of treatment for bipolar disorder in the Ethiopian situation.
    A. True B. False
15. Electro convulsive therapy can be used as first mode of treatment for mood disorder.
    A. True B. False
16. Psychotherapy can be useful in a patient with acute manic episode.
    A. True B. False
17. Generalized anxiety involves excessive worry about actual circumstances, events or conflicts.
    A. True B. False
18. When do you need to refer a patient with mood disorder?
19. State the signs and symptoms of patients with major depressive episode and manic episode.
20. List the physical and somatic complaints in a patient with anxiety disorder.
21. Refer to the case study on the learning activity and answer the following questions.
    A. What is the most probable diagnosis?
    B. What specific treatment would you initiate for this patient?
22. Define schizophrenia.
23. List the different sub-types of schizophrenia.
24. Write the dosage of chlorpromazine for a patient with schizophrenia.
25. When do you decide on withdrawal of maintenance treatment for a trial period in treating schizophrenia?
26. State the overall prognosis of schizophrenia.
27. What are the behavioral and physical effects of khat?

28. What are the manifestations of cannabis intoxication?
29. State the presentations of an individual with alcohol withdrawal syndromes.
30. What are the medical complications of alcohol abuse?
31. What treatment would you initiate for a patient with alcohol withdrawal syndromes?
32. State the difference between partial and generalized seizures.
33. How do you evaluate a patient with the first onset of seizure?

B. Pre - test for public health nurses

Answer the following “True”, “False” questions on separate answer sheet

_____1. There are various types and classifications of seizures.

_____2. There are various nursing roles in supporting and educating clients with epilepsy and their significant others in providing various information.

_____3. Clients with epilepsy often have no positive self image.

_____4. The only target for health education in epileptic disorder is the client him or herself.

_____5. Depression is one of the mood disorders which affects the client him/herself unlike other mental illnesses.

_____6. Heavy drinkers tend to come from non heavy drinking families.

_____7. The prognosis of schizophrenia depends up on mode of onset, stress, pre morbid personality, social condition, work and economic status of the client.

_____8. Alcoholism is a disorder which can affect all individuals who consume alcoholic beverages.

Part III. Answer the following questions on separate answer sheet

1. Identify the incorrect statement
   A. Seizure is a paroxysmal, uncontrolled, abnormal discharge of electrical activity in the brain.
   B. A brief sensory experience is termed as an aura.
   C. Epileptic cry is a cry which occurs in all cases of epilepsy.
   D. A prodromal phase is a phase which follows some seizures and may last minutes or hours.

2. Which of the following is not the drug treatment of epilepsy?
   A. Phenobarbital
   B. Phenytoin
   C. Carbamazepine
   D. Halloperidol

3. Which of the following dangerous activities should be avoided or undertaken only with special safe guards in seizure disorders?
   1. Working or sitting near fire 2.Tree climbing 3. Fluid drinking
   4. Horse back riding 5. Swimming
   Choose the best combination of the alternatives.
   A. 1, 2, 3 B. 3, 4, 5 C. 1,2,4,5 D. 1,2,3,4

4. Which of the following is not a precipitating factor for seizure disorder?
   A. Stress
   B. Lack of sleep
   C. Emotional stability
   D. Alcohol over indulgence

5. Identify the incorrect statement.
   A. Euphoria is one of the least symptoms of manic disorder.
   B. Heightened psychomotor activity is one of the main symptoms of manic disorders.
   C. Flight of ideas is a common phenomenon in manic psychoses.
   D. Mania is one of the illnesses which affect human being.

6. One of the following is the role of a nurse in case of seizure disorder.
   A. Explaining about the action of anti convulsant drugs to patients and care takers.
   B. Explaining about the importance of regular taking of prescribed medication.
   C. Explaining about the care during seizure.
   D. All of the above can be correct answer

7. Visual hallucination is mainly characteristic of
   A. Alcoholism
   B. Hebephrenic schizophrenia
   C. Simple schizophrenia
   D. Residual schizophrenia

8. The term ambivalence in mental illness represents.
   A. Mood stability
   B. Like and dislike of the same person
   C. Facial expression of someone
   D. Intolerance of some behavior.

9. Which of the following is not a typical characteristic of catatonic schizophrenia?
   A. Negativism
   B. Suspiciousness
   C. Rigidity
   D. Excitement

10. Which one of the following is often not in the differential diagnosis of schizophrenia?
   A. Organic mental disorder
   B. Mental retardation
   C. Pheochromocytoma
   D. Major affective disorder

11. Which one of the following is true about alcoholism?
    A. A teetotaler is a person who drinks alcohol some times.
    B. Tolerance is an increased need of alcohol to achieve the desired effect.
    C. Withdrawal symptoms occur at bed time together with rigidity of the extremities.
    D. Social drinkers are people who drink alcohol always for the sake of other people.

12. One type of schizophrenia which is characterized by giggling and the habit of looking into the mirror is:
    A. Paranoid schizophrenia
    B. Catatonic schizophrenia
    C. Hebephrenic schizophrenia
    D. Simple schizophrenia

2.2. Significance of common mental illnesses

About 500 million people are believed to suffer from neurotic, stress-related and somatoform disorders worldwide. Another 200 million suffer from mood disorders, such as chronic and manic depression. Eighty three million people are affected by mental retardation. Epilepsy affects 30 million, dementia 22 million and schizophrenia 16 million. Studies done on mental disorder in primary care settings in the USA showed 15 – 30% of patients visiting primary care offices have current mental disorder. Community based studies done in Stirling County, Canada in 1950s showed estimates of the lifetime prevalence of mental disorder to be 57%, and significant mental impairment 24%, with 20% needing psychiatric attention. Studies done in Midtown Manhattan showed that 81.5% had at least mild impairment caused by psychiatric symptoms and 23.4% had significant impairment (2).

In low-income countries where morbidity and mortality due to malnutrition and preventable infectious diseases are very common, mental disorders which are

not regarded as life-threatening problems are seen to be insignificant and unworthy of attention.

Religion and culture have great influence on the perception of the causation and the remedies of mental illnesses in Ethiopia. The majority of Ethiopians believe that all diseases, particularly mental illnesses are afflictions caused by supernatural evil factors.

Research done by Giel and co-workers between 1966 to 1969 from 4 general outpatient clinics in Ethiopia indicate that 6.8-18.0% of the attendees had psychiatric disorders (1). After the development of new screening methods, a prevalence of 12% was found for mental disorders in a small sample in Addis Ababa. The same instrument was used and a prevalence of 12.3% was found in a sample of mothers from the town of Jimma. Tafari et al. (1991) reported a prevalence of 17.2% in a larger sample of a rural community (1).

Most people in the country use traditional methods for treating mental illness and those who look for a modern treatment method do so after trying several local means (1).

Despite the fact that epidemiological findings consistently indicate that serious mental disorders in low income countries are as common as in the developed world, the opposite belief seems to govern the attitude and decisions of many health planners in low-income countries. As a result, the mental health service is not given its due priority. The idea that mental illnesses are less common in low-income countries than in developed countries has been disputed. The results of more recent studies suggest that some mental disorders like depression and anxiety are even more prevalent in low - income countries than in the developed world**.** Although it is clearly understood that mental illness can lead to poverty, disability, malnutrition and infection, it requires far-sightedness to appreciate the link between mortality and serious mental problems (1).

The diagnosis of mental illnesses is difficult owing to the subjective and imprecise psychological data. The collected data are vague and not clearly defined. This in turn has contributed to undermining the prevalence of mental illnesses (3).

The increasing concern about mental illnesses has spurred the World Health Organization (WHO) to adopt mental health as one component of the primary health care (PHC) model.

2.3. Learning objectives

By the time the reader completes studying this module, he/she should be able to:

- Identify mental illness as one of the most important public health problems.
- List the common mental illnesses.
- Identify the causes of common mental illnesses.
- Identify the clinical features of common mental illnesses.
- Describe the role played by each category of health professionals.
- Be able to begin basic management and triage appropriately.

2.4. Case study

Learning activity 1

A.B is a 25-year-old male merchant from Bate who was brought to the health center chained by his family members claiming that he is mad.

He was relatively healthy until six months ago when he started to show abnormal behavior of restlessness, sleeplessness, irritability, and aggressiveness. At times, he laughs out loud for no apparent reason, then becomes suddenly depressed. Finally, he couldn't get along with his family members, and colleagues. The problem has progressed to a point where currently he insults everyone around him and even fought with some of his colleagues at work. He frequently argues with his wife over matters of money and the wife comments about her husband's behavioral deviations. For this reason, the family has taken him for treatment to "holy water", but there was no improvement. His family

members kept him at home chained and confined to a small room so that no one can see him. He was not eating well since the onset of the illness and currently he totally refused to eat. His mother died when he was 2 years old. His father doesn't support his family and is an alcoholic. There is no family history of similar illness.

He has a step mother who is not in good terms with all family members. The family is of poor socio-economic standard. The patient's childhood was uneventful. He went to school up to 6th grade and left school due to lack of family support. He has no history of promiscuity. Most of the time he prefers to be alone and to keep things to himself. He worries a lot over trivial matters and doesn't socialize. He has developed the habit of chewing khat and drinks alcohol frequently.

The patient states that he is receiving messages from God and accuses his wife of poisoning his food. He always suspects that his wife is unfaithful to him. He hears voices which tells him that people are trying to kill him.

Questions from the case study

1. What problems did you identify in this patient?
2. Identify possible predisposing factors for mental illness in this patient.
3. What is your comment on the measures taken by the family members?
4. What would you do if you came across such a patient in the community?

2.5. Definitions

- **Mental health**:

  The balanced development of the individual's personality and emotional attitudes, which enable him to live harmoniously with his fellow - men.

  The capacity in an individual to form harmonious relations with others and to participate in, or contribute/constructively to changes in his social and physical environment (2).

- **Mental illness**

  A psychological or behavioral manifestation of impairment in brain functioning characterized by inaccurate perception of reality, disordered thinking, social dysfunction and the inability to cope (4).

- **Psychiatric emergencies**

  Severe disorders of mood, thought or behavior that require immediate attention.

2.6. Epidemiology

Generally, there is lack of comprehensive data concerning the epidemiological aspects of mental illness. However, it's believed that mental illnesses are as prevalent in low-income countries as in the rest of the world. Different epidemiological studies have shown that females have higher rates of mental illness than males. But some mental illnesses like drug abuse are more prevalent in males (2, 5).

- Income is not well associated with mental illnesses but less severe mental disorders are common in high social classes and more severe mental disorders are found in low social class (3). Mental illnesses are more common in those with large family size and in those who are single rather than married. They are seen more in cities than rural areas and the prevalence increase with the size of the city (2).
- There is a general tendency for mental illnesses to be more severe with increasing age.

The 1994 annual report of the Ministry of Health of Ethiopia showed that out of the patients seen at health institutions in one-year period, only 1.4% attended the clinics because of mental illness.

Mental illnesses or behavioral problems in children are given even less attention than those of adults in Ethiopia. In 1968, it was reported that only 11 of 18, 978 children who attended clinics showed some form of mental disturbance.

In a community study among children, 3 - 4% of those less than nine year-olds, and 5 - 10% of 10 - 19 years suffered from psychiatric illnesses.

2.7. Etiologic factors of mental illness

There is no known single causative agent for mental illnesses. Mental illnesses are caused by one or more of the following factors.

1. Genetic factors such as abnormalities in chromosomes may cause mental illness. Children from mentally ill parents are more likely to develop mental illnesses than children of healthy parents.
2. Organic factors like cerebrovascular diseases, nervous system diseases, endocrine diseases and chronic illnesses such as epilepsy are associated with mental illnesses.
3. Social and environmental crises like poverty, tension, emotional stress, occupational and financial difficulties, unhappy marriage, broken homes, abuse and neglect, population mobility, frustration, changes in life due to environmental factors like earthquakes, flood and epidemics are associated with mental illness.

   Environmental factors other than the psychosocial ones capable of producing abnormal human behavior include toxic substances such as carbon disulfide and monoxide, mercury, manganese, tin, lead compounds, etc.
4. Psychological factors like early childhood experiences of abuse and other psychological trauma during childhood play an important role in the development of mental illness in adult life.
5. Behavioral factors like indulging in drugs, alcohol and substances like khat are associated with mental illness.
6. Other factors associated with mental illness include nutritional deficiency; infections before and after delivery and birth trauma; road, occupational and other accidents; and radiation accidents. The nervous system is most sensitive to radiation during the period of neural development.

2.8. Clinical features of common mental illnesses

Mental illnesses have diverse signs and symptoms, which are grouped or clustered together to become a specific diagnosis. These groups of symptoms and signs should be persistent and intense to indicate mental illness. Examples of some clinical disorders are discussed below.

I. Disorders of perception

The most distinctive phenomena in mental illnesses are disorders of perception.

They are:

- Illusion: Misinterpretation of real external sensory stimuli

  E.g. A person looks at a cracked wall and sees branched tree.

- Hallucination: False sensory perception not associated with real external stimuli.

  E.g. A person sees spiders and snakes on the ceiling of his or her room where there are none.

II. Disorder of thinking

- Delusion: Patients may have fixed false beliefs that can not be corrected by reassuring and are not ordinarily accepted by other members of the particular person's culture.

  E.g. A person believes that an external force controls him or her, a spaceman sends him message by radio.

The patients may also have exaggerated self-importance.

E.g. A person believes he is the Prime Minister of Ethiopia when he or she is not.

III. Disorders of emotion

This involves a sustained abnormal feeling tone experienced by patient. Such patients may have low mood, anger, anxiety or excessive happiness without any reason.

E.g. 1. A person laughs at a sad event like death of a loved one.

2. A depressed person might feel that life isn't worth living.

IV. Disorders of motor activity

These are abnormalities of social behavior, facial expressions and posturing.

E.g. Standing on one leg for a long time.

V. Disorders of memory

This is the inability to retain and recall information (distortion of recall).

E.g.1. A person suddenly and unexpectedly leaves home and is unable to return.

2. A person may find it difficult to remember what he or she had for breakfast after few hours.

VI. Disorders of consciousness

This is the impaired awareness of the self and the environment. The level of consciousness can vary between the extremes of alertness and coma.

VII. Disorders of attention and concentration

This is the inability to focus on the matter at hand and failure to maintain that focus.

VIII. Insight

This is defined as awareness of one's mental condition. Patients who do not have insight do not know that they are sick and thus fail to seek medical attention.

People who are mentally healthy may exhibit some of the traits of mental illness when they are under stress and show adaptive behavior that serves to satisfy their basic needs in a socially acceptable way. Refer to the comparative characteristics of mentally healthy and ill individuals at Section 3.3.7.1.

2.9. Diagnosis

Psychiatry deals with causes and treatment of mental illness and the care to be given to such patients, who are considered abnormal in their behavior.

In general the symptoms are too vast and complex to reach a correct diagnosis of the illness, which it needs to comprise different approaches and models. Within the scope of this module, the best approach to the diagnosis of mental illness is to use the skills of:

1. Detailed history taking
2. Mental status examination.

2.10.Case management

Since clinical symptoms and signs are so varied, they can be clustered together as syndromes for treatment purpose. All patients who develop abnormal behavior should be taken to the nearby health institution for assessment and management; some with serious dysfunction may be referred to hospitals if necessary.

Treatment modalities in mental illnesses are

1. Psychotherapy: This is defined as any treatment done to influence behavior by verbal or non-verbal communication which includes reassurance and brainwashing.
2. Management therapy: This includes occupational, educational, art, music and recreational activities. All these can improve mental illness.
3. Drug treatment: Different types of drugs such as antidepressants, antianxiety agents, antipsychotics and anticonvulsants are used to treat mental illnesses. Since drugs are given for a long period of time, patients need to be followed for drug side effects and compliance.
4. Physical treatment
   - Electro-convulsive therapy: This is done by applying electric shock waves to the temporal area and behind the ears. This may improve the mental condition. However it is done only in hospitals.
   - Surgery: Surgery on the brain may also be done to treat cases that are the most serious. The surgery is done in hospitals. Now it is rarely

done and most of the modalities of treatment are replaced by drug treatment.

In cases of psychiatric emergencies, the attitude the caregivers towards the patient should be calm, quiet and confident. Patient should never be lied to about what he has or where his being taken to. If patients are violent, there should be a place for physical restraint to avoid risk of injury to him/herself and others.

Misconceptions towards mental illness

1. Patients in mental hospitals are often considered as people who spend their time doing useless things and showing bizarre behavior.
2. People who have had a mental illness are viewed with suspicion and as dangerous persons.
3. Mental illness is something to be ashamed of.
4. Mental illness is caused by evil sprits (black magic).
5. Mental illness is something that cannot be cured and is contagious.
6. Mental hospitals are places where only dangerous, mentally ill people are treated.
7. Marriage can cure mental illness.

2.11.Prevention

Three levels of prevention have been described: Primary, secondary and tertiary preventions.

I. Primary prevention

This is prevention or the control of preventable causes: There are limitations to the knowledge of the causes of mental illnesses. However, there are certain known risk factors associated with mental illness. Hence, prevention of mental illness involves control of those risk factors including:

1. Prevention and control of environmental hazards and other causative factors such as:
    - Prevention of poisoning and drug intoxications

        E.g. Lead, arsenic

- Prevention of nutritional deficiency

  E.g.: Iodine, vitamin B deficiency.
- Brain injuries

  E.g.: Trauma as a result of road traffic accidents.
- Control of early childhood and neonatal infections.

  E.g.: Meningitis
- Legal and social enforcement against drug abuse
- Control of environmental pollution:

  E.g.: Pollution by mercury

2. Prevention/control of pregnancy related risk factors like:
   - Infections and Rh incompatibility
   - Counseling for known genetic risk factors
   - Early referral of mothers with abnormal labor
3. There are certain relationships between human development and mental illness - prenatal period, first 5 years of life, school age and adolescence are the most important developmental periods. Therefore greater effort should be made to establish harmonious family relations to prevent the occurrence of mental illness in the later life of the child.
4. Health education about
   - Environmental hazards
   - Antenatal care
   - Misconceptions about mentally ill patients.
5. Persons subject to stress such as prospective parents, migrants, adolescents and the population in disaster stricken areas have to be supported to improve their interpersonal relationships.

II. Secondary prevention

This is early diagnosis and treatment of a patient with mental illness

- Referral of a mentally ill patient to a health institution for diagnosis and treatment in the early stage so that the progress of illness will be halted or its duration shortened.

III. Tertiary prevention

This aims to reduce chronic disabilities from mental illnesses by:

- Provision of social support
- Creation of sheltered workshops and supervised residential care outside a health institution.

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UNIT THREE

SATELLITE MODULES

3.1.Satellite module for health officers

3.1.1. Purpose and use of the module

This training material is meant to introduce basic concepts of mental illnesses, which are believed to be major disorders of public health importance in Ethiopia

These are psychotic disorders, mood disorders, anxiety disorders, seizure disorder and substance related disorders, disorders related to medical conditions and somatoform disorders.

3.1.2. Directions for use

Before reading this satellite module, make sure that you have completed the pre - test and studied the core module.

Pre and post tests for the health officers are in the core module Unit 2 Section 2.1.2 (Part B).

3.1.3. Learning objectives

At the end of the module the reader should be able to:

1. Understand the presentation of patients with psychosis, mood disorders, anxiety disorders, seizure disorder and substance related disorders.
2. Develop the skill of diagnosing the above mentioned mental illnesses
3. List some different diagnoses of the above-mentioned disorders.
4. Understand the course and prognosis of the disorders
5. Describe the management guidelines of the above disorders

3.1.4. Psychiatric evaluation

Specific to the psychiatric evaluation is the mental status examination. A well-trained health worker should take a detailed psychiatric history and gather data

with confidentiality, carry out the mental status examination, develop a differential diagnosis and devise a treatment plan.

A complete **psychiatric history** should include:

- Identification

  Name, age, sex, informant, relationship of informant to patient.
- Length of acquaintance
- Reasons for referral

  (E.g. severe depression, failing to respond to drug treatment)
- History of present illness including medical conditions

- Symptoms with duration and mode of onset, course of symptoms (persistent or intermittent).
- Time relationship between symptoms and social, psychological and physical disorders.
- Effects on work, social functioning and relationships
- Sleep, appetite and sexual drive disturbances
- Any treatment given - improvement
  - Family history
- Paternal and maternal status - occupation, personality, quality of relationship with the patient and with one another,
- Siblings - name, age, marital status, occupation, personality, mental and psychiatric illness, quality of relation with patient.
- Social position of family - atmosphere at home, family problems - like serious illness of one parent.
- Family history of illness - personality disorder, epilepsy, alcoholism, other neurological or medical disorder.
  - Personal history
- Abnormality during pregnancy and birth - was pregnancy wanted?
- Difficulties in habit training and delay in achieving milestones (walking, talking, sphincter control etc...)
- Separation from parents and reaction to it.

- Health during childhood-serious illness especially that affecting central nervous system, febrile seizures, hospital admission
- Nervous problems in childhood.
- Fears, temper tantrums, shyness, stammering, blushing, sleep-walking, prolonged bed wetting, frequent night mares.
- School - age of starting and finishing each school, types of school, academic records, relationship with teachers and pupils.
- Occupation - chronological list of jobs, reasons for changes, present financial circumstance, satisfaction in work, any stress at work.
    - Service or work experience
- Promotion and awards
- Disciplinary problems
- Menstrual history, menopause
    - Marital history
- Age at marriage, how long the spouses knew each other before marriage and length of engagement
- Previous relationships and engagements
- Present age, occupation, health, personality of spouse.
- Quality of marital relationship
    - Sexual
- Attitude to sex and contraception
    - Children
- Names, sex, age, date of abortions or stillbirth, emotional and physical development of children.
- Mental and physical health of children
    - Present social situation

- Housing, composition of household, financial problems
    - Previous medical history
- Illnesses, accidents
    - Previous psychiatric illness
- Nature and duration of illness - date, duration and progress of any treatment.
- Personality before present illness
- Friends - few, many, superficial, close, own or opposite sex
- Relationship with workmates and superiors
- Use of leisure time

  Hobbies and interests, memberships of societies and clubs.
- Predominant moods.

  Anxious, worrying, cheerful, optimistic, pessimistic, self-depreciating, over-confident, stable or fluctuating, controlled or demonstrative.
- Character

  Sensitive, suspicious, jealous, resentful, irritable, impulsive, selfish, timid, reserved, lack of confidence, rigid,
- Attitudes and standards
- Moral and religious, attitude towards health and the body
- Habits - food, alcohol, tobacco, drug, sleep

Mental status examination

This includes evaluation of the patient at one point in time.

Behaviors to be observed are:

- Patient's general appearance: development, nourishment, grooming
- Attitude - hostile, co-operative, guarded
- Behavior - agitation, level of activity, gait
- Speech-rate, volume, tone and mode, relevance, coherence
- Mood
- Affect

- Perception
  - Hallucination
  - Illusions
- Form of thought
  - Flow of associations, loosening
  - Flight of ideas
  - Neologism, word salad, blocking
- Content of thoughts
  - Delusions
  - Obsessions
- Cognition - measures ability of the brain to function
  - Orientation
  - Concentration
  - Memory
  - Calculation
  - Reasoning
- Judgment
- Insight

3.1.5. Description of common mental illnesses

The common mental illnesses include psychotic disorders, mood disorders, anxiety disorders, substance related disorders, seizure disorders, somatoform disorders, dissociative disorders, and mental disorders due to a general medical conditions. The most important ones are discussed below.

3.1.5.1 Psychotic disorders

Schizophrenia is the most common and classic psychotic disorder. However, there are other psychotic syndromes that don't meet the diagnostic criteria for schizophrenia.

These include schiophreniform disorder, schizoaffective disorder, delusional disorder, brief psychotic disorder, psychotic disorder due to a general medical condition, and substance induced psychotic disorder, and postpartum psychosis.

Schizophrenia

Definition

Schizophrenia is a group of disorders characterized by psychotic symptoms that significantly impair functioning and that involves disturbances in feeling, thinking and behavior.

Epidemiology

1. Incidence and prevalence
   - The incidence of schizophrenia has been reported to range from 0.03% - 0.12%.
   - Life-time prevalence is approximately 1 - 1.5%.
   - World - wide 2 million new cases appear each year.
   - Prevalence, morbidity and severity of presentation are greater in urban than in rural areas and in industrialized than in the non-industrialized countries. Studies done in Addis Ababa in 1994 showed lifetime prevalence of schizophrenia to be 0.4% and one month prevalence to be 0.3%.
2. Sex ratio - the male to female ratio is 1:1.
3. Age of onset
   - Most common between age 15 and 35 years. Rare before the age of 10 or after the age of 40.
   - Earlier onset for men than for women.
4. Socio-economic status.
   - The highest rates of schizophrenia are found in the lower socio-economic classes. This suggests that socioeconomic factors help precipitate schizophrenia in genetically vulnerable people or that schizophrenic patients tend to drift downward in socioeconomic status.

5. Familial pattern
    - Schizophrenia tends to run in families, (see the description below).

Prevalence of schizophrenia in specific populations

Population	Prevalence
General population	1 – 1.5 %
First – degree relative	10 – 12%
Second degree relative	5 – 6 %
Child of two schizophrenic parents	40%
Dizygotic twins	12 – 15 %
Monozygotic twins	45 – 50%

6. Religions and race
    - Difference in epidemiology of schizophrenia among different religions and races has also been found

Etiology

Although the exact cause has not been identified, several theories have been proposed regarding the etiology of schizophrenia. A brief summary of the theories is as follows:

1. Biologic theory

This theory states that there are genetic and biochemical factors predisposing to schizophrenia.

a. Genetic theory

This theory suggests that there are genetic factors responsible in the Occurrence of schizophrenia, which can be evidenced from the high prevalence rate of schizophrenia in families than in the general population. (Refer to the description under epidemiology).

b. Biochemical theory

In this theory, increased dopamine and nor epinephrine activity and decreased GABA activity have been attributed to be causes of schizophrenia

2. Physiological theory

This theory states that schizophrenia develops early in life because of various stressors. Among these are poor mother - child relationships, deeply disturbed family interpersonal relationships, impaired sexual identity and rigid concept of reality.

3. Organic theory

This states that schizophrenia arises from functional deficit occurring in the brain caused by stressors such as infection, poison and trauma.

Precipitating events

1. Psychosocial stressors
   Social and economic stresses are associated with high rate of schizophrenia.
2. Traumatic events like death of a loved one and past sexual, physical and emotional abuse can be associated with schizophrenia.
3. Drug and alcohol abuse
   Certain drugs (e.g. amphetamine, cocaine, hallucinogens, phencyclidine) and alcohol may precipitate schizophrenia.

Clinical features

Patients with schizophrenia present with the following manifestations.

- Abnormal content and form of thought

  For example, delusions of persecution, of reference, of grandiosity, of being controlled and of mind reading. There are also delusions of thought broadcasting, insertion and withdrawal.

- Distorted perception

  This could be an illusion or hallucination. The hallucination could be auditory, visual, olfactory, gustatory, tactile or somatic.

  An illusion is a misperception or misinterpretation of real external sensory stimuli: e.g. piece of rope being perceived as snake

- Illogical form of thought

  For example, circumstantiality, tangentiality, incoherence, flight of ideas, loosening of associations, thought blocking, clang association and neologism.

- Changed affect

  For example, blunted affect, flat affect, inappropriate affect, poor eye contact, unchanged facial expression and decreased spontaneous movements.

- Altered volition

  For example, inadequate drive or motivation and marked ambivalence.

- Change in psychomotor behavior

  Such as agitation, abnormal posturing as in catatonia.

- Impaired overall functioning

  The patient's level of functioning declines or the patient fails to achieve the expected level and hence can't lead a productive life.

- Impaired interpersonal functioning

  For example, social withdrawal, emotional detachment and aggressiveness.

- Impaired sense of self.

  For example, gender confusion, inability to distinguish internal from external reality.

Diagnosis

For the diagnosis of schizophrenia different varieties of diagnostic systems have been used. DSM - IV and ICD-10 diagnostic criteria are used currently. DSM - IV diagnostic criteria is described below.

DSM – IV Diagnostic criteria for schizophrenia

A. Two or more of the following symptoms present for most of 1 month.
    1. Delusions
    2. Hallucinations
    3. Disorganized speech
    4. Grossly disorganized or catatonic behavior.
    5. Negative symptoms

    Note: Only one of those is required if delusions are bizarre or if hallucinations consist of a voice keeping up a running commentary on the person's behavior or thoughts, or if there are two or more voices conversing with each other.

B. Marked social or occupational impairment

C. Duration: Continuous signs of disturbance persist for at least 6 months. This 6 month period must include at least 1 month of symptoms that meet criterion A.

D. Symptoms of schizoaffective and mood disorder are ruled out.

E. Substance abuse and medical conditions are ruled out as etiologies.

Schizophrenia subtypes

In all of the following subtypes of schizophrenia, the diagnostic criteria for schizophrenia must be met first, particularly criterion A symptoms:

1. Paranoid type

A. Preoccupation with one or more delusions or frequent auditory hallucinations
B. Does not have prominent disorganized speech, disorganized behavior, flat or inappropriate affect, or catatonic behavior

2. Disorganized type

A. All of the following are prominent:
    1. Disorganized speech
    2. Disorganized behavior

3. Flat or inappropriate affect

B. Does not meet criteria for catatonic type

3. Catatonic type

Clinical picture is dominated by at least two of the following:

a. Motor immobility as evidenced by catalepsy or stupor
b. Excessive motor activity (apparently purposeless and not influenced by external stimuli)
c. Extreme negativism or mutism
d. Peculiarities of voluntary movement, such as posturing, stereotyped movements, prominent mannerisms, or prominent grimacing.
e. Echolalia or echopraxia

4. Undifferentiated type:

Symptoms of schizophrenia criterion A are present, but the criteria are not met for paranoid, catatonic or disorganized types.

5. Residual type

A. Criterion A for schizophrenia is no longer met, and criteria for other subtypes of schizophrenia are not met.
B. Evidence of the disturbance (evidenced by negative symptoms or two or more criterion A symptoms) is present in an attenuated form.

Course and prognosis

Course

Prodromal symptoms of anxiety, terror or depression generally precede the onset of schizophrenia, which may be acute or insidious. Prodromal symptoms may last a year or more before the onset of overt psychosis. Precipitating events such as emotional trauma, drugs, separation or death of relative may trigger episodes of illness in predisposed persons. Classically, the course of schizophrenia is one of deterioration over time, with acute exacerbations superimposed on a chronic picture. Post psychotic depressive episode may occur in the residual phase. Over the course of the illness, the more florid positive psychotic symptoms such

as bizarre delusions and hallucination tend to diminish, while the more residual negative symptoms such as poor hygiene, flattened emotional response and various abnormal behaviors increase.

Relapse rates are approximately 40% in 2 years on medication and 80% in 2 years off medication.

Suicide is attempted in 50 % of patients; 10% are successful.

Prognosis

Approximately one third of patients lead somewhat normal lives, one third continue to experience significant symptoms but can function within the society, and the remaining one third are markedly impaired and require frequent hospitalizations.

Differential Diagnosis

Schizophrenia should be differentiated from the following disorders.

1. Medical and neurological disorders.
2. Schizophreniform disorder symptoms are identical to schizophrenia but duration is less than 6 months.
3. Brief psychotic disorders symptoms lasting less than 1 month.
4. Mood disorder
5. Schizoaffective disorder in which mood symptoms develop concurrently with symptoms of schizophrenia.
6. Delusional disorder
7. Personality disorder
8. Factitious disorder

Management

Clinical management of schizophrenic patient may include hospitalization and antipsychotic medication as well as psychosocial treatments.

A. Pharmacological

1. The antipsychotic drugs used include

- Phenothiazines
  - Chlorpromazine
  - Thioridazine
  - Fluphenazine
  - Trifluperazine, etc
- Butyrophenones
  - Haloperidol
  - Droperidol
- Atypical antipsychotics
  - Clozapine
  - Risperidone
  - Olanzepine
  - Ometiopine

2. Available drugs in Ethiopia

- Chlorpromazine
- Thioridazine
- Haloperidol and
- Fluphenazine
- Trifluphenazine are the commonly used drugs.

3. Dosages

Chlorpromazine

The response to chlorpromazine is variable among different patients. Therefore, dosage should be individualized. Dosages of 150mg to 1200mg daily in 3 - 6 divided doses may be required to control the symptoms. Many cases are brought under control on a dosage of 200 - 400 mg daily. When improvement is established, the dosage may be reduced to a maintenance level which usually

ranges between 100 and 300 mg daily. But much higher doses may be required in some instances.

Thioridazine

- 50 - 500 mg daily. The upper limit of Thioridazine can go upto 800 mg/day in divided doses.
- Monitor with EKG as it causes ventricular arrhythemia.

Haloperidol

- 1 - 10mg orally or IM over 30 - 60 minutes may be used for rapid tranquilization; daily dosages may go as high as 100 mg.

Fluphenazine

- Depot fluphenazine 25mg IM can be effective for 14 - 21 days.
- Monitor with EKG as it causes ventricular arrhythmia.

Maintenance

After signs and symptoms abate and the patient is stabilized (usually after 4 weeks), dosage can be reduced to the lowest level to maintain the patient free of symptoms.

After 6 months in remission, the drug can be withdrawn for a trial period to see if relapse occurs, at which point therapy is reinstituted. Some patients may need lifelong maintenance therapy to prevent relapse.

B. Electroconvulsive therapy

Used especially in patients having catatonic symptoms.

C. Psychosocial therapy

Antipsychotic medication alone is not as effective in treating schizophrenic patients as when the drugs are coupled with psychosocial interventions.

These include:

- Behavior therapy
- Group therapy
- Family therapy
- Supportive psychotherapy

3.1.5.2. Mood disorders

Introduction

Mood disorder is characterized by feeling of depression or euphoria sometimes with psychotic features.

Specific 'mood episodes' should be identified which help as building blocks for diagnosing 'mood disorders'.

Four types of mood episodes are identified.

- Major depressive episodes
- Mixed episode
- Manic episode
- Hypo manic episode

A. Major depressive episode (MDE)

This is characterized by a feeling of anhedonia, withdrawal from family and friends, loss of libido, weight loss, anorexia, disturbed sleep (like insomnia or hypersomnia) of at least fifteen days duration.

On examination - such patients may have psychomotor retardation, agitation, sad mood, soft, low monotonous speech, suicidal ideas, feeling of hopelessness, worthlessness, guilt, delusions, hallucination, poverty of thought, poor concentration and memory.

B. Manic episode

This is a distinct period of elevated or irritable mood that lasts at least 1 week.

Such patients have disinhibited behavior, hyper sexuality, and excessive energy.

On examination, such patients have psychomotor agitation, hyper excitability and euphoric mood, pressured and loud speech, elevated self-esteem, flight of ideas, delusions (e.g. of grandiosity), poor concentration and very poor judgment.

C. Mixed episodes

Such patients meet the criteria for two at the above disorders, which last over a week. They have pressured speech, irritability and the need for little sleep while feeling worthless and suicidal

D. Hypo manic episode

This is similar but less severe than manic episode. Such episodes last for at least 4 days. There is no need for hospitalization, no psychotic features (delusions or delusions) and no severe social or occupational impairment.

Mood disorder is divided into:

I. Depressive disorders
II. Bipolar disorders
III. Others like dysthymic disorder, cyclothymic disorder.

The diagnoses of major depressive disorder or bipolar disorder depend on these episodes.

I. Major depressive disorder (MDD)

One or more of major depressive episodes are present in such patients but no manic, hypomanic or mixed episodes and these should last ≥ 2 weeks.

II. Bipolar I

Patient has at least one manic or mixed episode with or without major depressive episode or hypo manic episode.

III. Bipolar II

Patient has at least one major depressive episode and hypomanic episode in the absence of any manic or mixed episode.

Epidemiology

Depression is the 5th leading illness among women and the 7th among men in developing countries.

Lifetime prevalence of mood disorders is found to be 1.6% in Addis Ababa and 6.2 % in Butajira (1).

Age is not associated with risk but depressive disorders are believed to begin during adolescence.

Female sex is found to be significantly associated with mood disorders in a local study in Butajira (1).

The risk decreases with increasing educational attainment.

There is lower risk in the employed than the unemployed.

Ethiology

- Biological
  - Neuro chemical
    - Increased level of norepinephrine, serotonin, dopamine in mania.
    - Decreased level in depression.
  - Hormonal
    - Hypothalamus-pituitary-adrenal axis involved

      E.g. Increased cortisol level in depression

      Decreased immune functions in mania and depression
  - Genetic

    Both disorders tend to run in families
- Psychosocial
  - Stress
  - Psychoanalytic
    - Loss of a loved one
  - Cognitive
    - Negative self view
    - Negative interpretation of experience
    - Negative view of future