

**Northwest Community Healthcare
Paramedic Education Program
BEHAVIORAL EMERGENCIES**

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Reading assignment:

Aehlert Vol. 1 pp 1170 - 1233

SOP: Behavioral Emergencies

Policies: E-1: Emotionally Disturbed Patients; Use of restraints

KNOWLEDGE OBJECTIVES

Upon completion of the assigned readings, class, and homework questions, each participant will independently do the following with at least an 80% degree of accuracy without critical error:

1. Define behavior and distinguish between normal and abnormal behavior.
2. Define behavioral emergency.
3. Discuss the prevalence of behavior and psychiatric disorders.
4. Discuss the factors that may alter the behavior or emotional status of an ill or injured individual.
5. Describe the medical legal considerations for management of emotionally disturbed patients including the use of Petition forms.
6. Discuss the pathophysiology of behavioral and psychiatric disorders.
7. Describe the overt behaviors associated with behavioral and psychiatric disorders.
8. Define the following terms: affect, anger, anxiety, confusion, depression, fear, mental status, open-ended question, and posture.
9. Describe the verbal techniques useful in managing the emotionally disturbed patient.
10. Explain appropriate measures to ensure the safety of the patient, paramedic and others.
11. Describe the circumstances when bystanders and others should be removed from the scene.
12. Describe the techniques that facilitate the systematic gathering of information from the emotionally disturbed patient.
13. Recognize common anti-anxiety, antidepressants, anti-psychotic medications.
14. Identify interviewing traps that impair effective communication
15. List situations in which the PM is expected to transport a patient forcibly and against his will.
16. Identify techniques for physical assessment in a patient with behavioral problems.
17. Describe methods of chemical and physical restraint.
18. List the risk factors for suicide.
19. List the behaviors that may be seen indicating that patient may be at risk for suicide.
20. Integrate pathophysiological principles with the assessment of a pt with behavioral and psychiatric disorders.
21. Differentiate between the various behavioral and psychiatric disorders based on the assessment and history.
22. Formulate a field impression based on the assessment findings.
23. Develop a patient management plan based on the field impression of a behavioral emergency based on the System SOPs.

Affective objectives:

1. advocate for empathetic and respectful treatment for individuals experiencing behavioral emergencies.

Psychomotor objectives:

1. Role play communication techniques that achieve effective communication and therapeutic patient relationships
2. Accurately complete a petition for patients for whom a petition is indicated
3. demonstrate safe techniques for managing and restraining a violent patient.

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I. Introduction

The mind, body, spirit, and emotions are inseparable parts of a whole human being. When a person becomes ill with a disease, the illness usually affects his/her mood and behavior. Similarly, changes in the mental state may influence the body's physical symptoms. It is important to observe and relate to the person as a whole.

A. Epidemiology

1. Incidence/magnitude

- a. Estimates vary with some as high as 20% of the US population will have some form of official psychological diagnosis in a year with 5.4% of these being classified as serious (LeBel, 2003).
- b. According to a Surgeon's General's report, mental illness is secondary only to cardiovascular disease in terms of disease-adjusted life years (18.6 and 15.4 years, respectively).
- c. Incapacitates more people than all other health problems combined
- d. Some researchers estimate that 1 person out of every 7 will require treatment for an emotional disturbance.

2. Common *MYTHS* and misconceptions

- a. Abnormal behavior is always bizarre
- b. All mental patients are unstable and dangerous
- c. Mental disorders are incurable
- d. Having a mental disorder is cause for embarrassment and shame

3. Mental disorders appear to be disorders of brain circuits, in contrast to classical neurological disorders in which focal lesions are apparent

- a. Just like heart disease can involve arrhythmias or infarction of heart muscle
- b. Studies with deep brain stimulation addressing depression as a "brain arrhythmia" show that changing the activity of specific brain circuits leads to remission of otherwise treatment refractory depressive episodes
- c. Using imaging techniques like PET, fMRI (functional MRI), MEG (magnetoencephalography), and high resolution EEG, we can map the broad range of cortical function with high spatial and temporal resolution.
- d. We can now begin to study the mind via the brain
- e. Mapping patterns of cortical activity reveals mechanisms of mental function that are just not apparent by observing behavior
- f. <http://www.nimh.nih.gov/about/director/2011/mental-illness-defined-as-disruption-in-neural-circuits.shtml>

B. Behavior

1. Defined: A person's observable conduct and activity is known as his or her behavior.

2. Concept of normal behavior

- a. Disagreement over what is "normal"
- b. No clear definition or ideal model
- c. Ideas of normal vary by culture/ethnic group
- d. Society accepts it (this is a changing target for many behaviors)

3. **Concept of abnormal behavior**
 - a. *Maladaptive behavior* is more useful term
 - b. Deviates from society's norms and expectations
 - c. Interferes with well-being and ability to function
 - d. Harmful to individual or group
4. **Concept of behavioral emergencies**
 - a. Unanticipated behavioral episode
 - b. Behavior that is threatening to patient or others
 - c. Requires immediate intervention by emergency responders (police, EMS)
- C. **Behavioral and psychiatric disorders**
 1. 24% of state prisoners and 21% of local jail prisoners have a recent history of a mental health disorder
 2. One in four adults (~57.7 million Americans) experience a mental health disorder in a given year
 3. Annual economic, indirect cost of mental illness estimated at \$79 billion
 4. **Description**
 - a. Cover a broad range of conditions of varying severity
 - b. **Mental illness** is defined as those conditions in which the patient's problem is one of mood, thought, or maladaptive behavior with distress or impaired functioning such that the patient may be dangerous or disturbing to himself or to others.
 - c. May be caused by emotional or physiologic conditions
 - d. All create undesirable consequences
 - e. **Serious mental illness** is defined as "being significantly and functionality impaired by the illness for an indefinite amount of time" (LeBel, 2003).
- D. **Broad categories of behavioral disturbances (psychopathology)**
 1. **Biological/organic** causes are considered when a person is suffering from a physical illness or is under the influence of a substance that interferes with normal cerebral function. Diabetes, seizures, severe infections, metabolic disorders, head injury, stroke, alcohol, and drugs may all cause disturbed behavior. Some of these disorders have an heredity component.
 2. **Psychosocial:** Conditions related to a patient's personality style, dynamics or unresolved conflict or crisis management methods
 - a. Childhood trauma
 - b. Parental deprivation
 - c. Dysfunctional family structure
 3. **Socio-cultural: Situational** causes are those where normal individuals develop abnormal reactions to stressful events. Almost anyone can "go to pieces" if subjected to enough stress, but some people are more vulnerable than others. When a person's basic needs are threatened, the severity of the crisis will depend on their ability to deal with their feelings. They may cope with it by finding ways to alter the situation or their perception of it so that it is no longer stressful. Alternatively, they may attempt to decrease the discomfort by escaping from the stress, in the form of alcohol, drugs, suicide, or psychiatric symptoms.
 - a. Environmental violence
 - (1) War, riots
 - (2) Rape, assault
 - b. Death of a loved one
 - c. Economic/employment problems

- d. Prejudice and discrimination
 - e. Cultural norms and expectations
- E. **Psychiatric causes** are problems that arise in the mind of the patient. Psychiatric syndromes can be divided into the following categories:
- 1. **Psychotic disorders** characterized by an impaired view of reality;
 - 2. **Affective disorders** of mood; anxiety disorders involving overwhelming fear; disorientation and disorganization; and
 - 3. Hostile and violent patients.

"If the patient depresses you, they have a depressive disorder.
If they annoy you, they have a personality disorder.
If they confuse you, they're schizophrenic."

- F. Why do EMS personnel see behavioral emergencies?
- 1. Substance abuse may lead to violent behavior
 - 2. Psychotropic drugs & have allowed deinstitutionalization of persons with mental illness
 - 3. Decreased funding for institutional care for chronic psychiatric patients has resulted in closure of inpatient facilities
 - 4. EMS may find bizarre or unusual behavior or statements leading you to believe that they may be in imminent danger of harming themselves
 - 5. Violent acting out
 - 6. Suicidal thoughts and/or suicide attempts
 - 7. Inability to care for themselves in their home environment
 - 8. Need for transport against their will

II. **Specific psychiatric disorders**

- A. Psychiatric syndromes are broadly divided between **psychotic** and **non-psychotic** disorders.
- B. **Recognized sub-types/classifications**
- 1. Cognitive disorders
 - 2. Schizophrenia and other psychotic disorders
 - 3. Mood disorders
 - 4. Anxiety disorders
 - 5. Substance-related disorders
 - 6. Somatoform disorders
 - 7. Factitious disorders
 - 8. Dissociative disorders
 - 9. Eating disorders
 - 10. Impulse control disorders
 - 11. Personality disorders
- C. **Psychotic disorders** are further divided into two general categories: **organic** and **functional**. This division is made on the basis of the mental status exam.
- 1. **Organic disorders cause abnormal cognitive function** due to organic causes
 - a. Other organic mental symptoms (hallucinations, delusional state, depression, intoxication, or withdrawal syndrome)
 - b. Disease processes that can cause an organic disorder
 - (1) Metabolic disorders
 - (2) Infections
 - (3) Neoplastic diseases, tumors
 - (4) Endocrine disorders
 - (5) Degenerative neurological diseases
 - (6) Cardiovascular diseases

- c. Physical/chemical injury
 - (1) Trauma
 - (2) Drug abuse
 - (3) Drug reaction
- d. **Cognitive disorders**
 - (1) **Delirium** (acute brain syndrome, toxic/metabolic encephalopathy, confusional state)
 - (a) **Definition:** An **acute** global impairment of brain function, **usually transient** and/or treatable. Although delirium can mimic any major psychiatric disorder, the hallmark is that cognitive (intellectual) functioning is acutely impaired.
 - (b) **Characteristics**
 - (i) Sudden or recent onset in the context of medical illness, trauma, or drugs; however, these factors may not be apparent initially
 - (ii) Fluctuation of signs, even minute to minute, tending to ↑ at night
 - (iii) Disorders of any of the following:
 - (a) Behavior (psychomotor agitation, apathy)
 - (b) Mood (excited, apathetic, labile)
 - (c) Thought process (disordered speech)
 - (d) Thought content (delusions)
 - (e) Perception (hallucinations)
 - (f) Attention
 - (g) Memory
 - (h) Orientation
 - (i) Consciousness
 - (j) Visual hallucinations
 - (c) **Causes:** Often lie outside the CNS. The **differential diagnosis of delirium** parallels that of obtundation and coma. Think vowels and tips (AEIOU-TIPS). Organic causes of psychosis:
 - (i) Medications or abused drugs (intoxication or withdrawal)
 - (ii) Endocrine or metabolic disorders
 - (iii) Infections: Systemic or CNS (encephalitis)
 - (iv) Neurologic degenerative diseases
 - (v) Hypertensive encephalopathy
 - (vi) Seizure disorders, especially postictal states
 - (vii) Chronic subdural hematoma
 - (viii) Hepatic or renal disease
 - (ix) Thiamine deficiency
 - (x) Oncologic diseases, including cerebral metastases or hormone-producing tumors
 - (xi) Autoimmune disorders
 - (d) **Differential diagnosis:** Functional disorders i.e. schizophrenia, mania, or major depression.
 - (e) **Management**
 - (i) Accurate history
 - (ii) Assess for physiologic causes: glucose level, SpO2, ECG, temp
 - (iii) Support ABCs

(2)

Dementia (chronic organic brain syndrome)

- (a) **Definition:** Progressive, deterioration of intellectual or cognitive function, usually of insidious onset and gradual course over months to years. Often irreversible.

(b) **Characteristics of dementia**

- (i) Impaired cognition (especially memory)
- (ii) Subtle or major personality change, impaired judgment and abstract thinking.
- (iii) Progresses from word retrieval problems to **aphasia** (inability to communicate).
- (iv) **Apraxia:** Impaired ability to carry out motor activities despite intact sensory function (can't dress or feed themselves, zip a zipper, etc.)
- (v) **Agnosia:** Failure to recognize objects or stimuli despite intact sensory function. You can't instruct them to pick up the fork. They won't recognize a fork. They'll just start picking up everything on the table until they get it right.
- (vi) **Disturbance in executive functioning:** Impaired ability to plan, organize, or sequence.
- (vii) Occasional frankly psychotic symptoms (non-auditory hallucinations, delusions)
- (viii) Results in profound social impairments
- (ix) Fluctuation of symptoms, worse at sunset (night). Often become very agitated.

(c) **Causes**

- (i) Primary degenerative dementia of the Alzheimer type: most common (60%)
- (ii) **Treatable causes (40%) must be ruled out**
 - (a) **CNS:** Infection, hemorrhage or trauma, (chronic subdural hematoma), infarct, low-pressure hydrocephalus, tumors, Parkinson's disease, multiple infarcts
 - (b) **Non-CNS:** Infection, vascular problems, AIDS, neoplasm, nutrition (↓ vitamin B₁₂, folate), endocrine, toxic, substance abuse, and metabolic dysfunction.

(d) **Differential diagnosis**

- (i) **Major depression:** Depressed patients may perform poorly on cognitive tests owing to lack of motivation (pseudodementia).
- (ii) **Delirium:** Elderly patients, even with a clear hx of progressive dementia, may have a rapid onset of confusion, clouded consciousness, delusions, hallucinations, or agitation. Most often represents a superimposed delirium related to underlying medical illness.

- (iii) **Chronic schizophrenia:** in late stages of schizophrenia, apathy may lead to poor performance on cognitive testing.

(3) **Management**

- (a) Protect and support
 - (b) Assess and treat co-existing emergency medical conditions
 - (c) Transport to appropriate facility
2. **Functional psychoses** do not generally cause abnormal cognitive function, although other parts of the mental status exam may show substantial impairment; the functional psychoses include:
- a. Schizophrenia
 - b. Major affective disorders: mania - major depression, or alternating between them over time

D. **Schizophrenia**

1. **Definition:** Schizophrenia is now viewed as a spectrum with multiple parts to be examined by researchers. It is a psychotic disorder that may be acute or chronic, often relapsing or remitting, with 8 possible dimensions: hallucinations, delusions, disorganized speech, negative symptoms, disorganized behavior, mood, motor and cognition in terms of thought content, perception, and judgment, but without clouding of consciousness and cognition, although easily distracted. If the latter are present, the diagnosis is much more likely to be dementia or delirium.
2. Symptoms usually must be present for a significant portion of each month over the course of six months or longer before the diagnosis can be made. The symptoms must cause a social or occupational dysfunction.
3. **Characteristics**
 - a. **Hallmarks**
 - (1) Disturbances of thought & attention
 - (2) Disturbances of perception
 - (3) Disturbances of affect
 - (4) Motor symptoms & withdrawal from reality
 - (5) Decreased ability to function
 - b. **Onset:** Appears as early as age 3 although adolescence or early 20s most common (no one gets it after 45)
 - c. Poor premorbid history - e.g., a long history of **social withdrawal**, eccentricity, and impaired educational/vocational function
 - d. Family history of schizophrenia often positive
 - e. Inappropriate affect; laugh or cry at inappropriate times or blunted emotions
 - f. Disturbed communications
 - g. **CT & MRI:** Structural abnormalities in brains of some pts in the ventricles, frontal and temporal lobes, & hippocampus. All areas involved in thinking, concentration, memory, and perception.
 - h. **PET scans** show reduced metabolism in frontal lobes of unmedicated patients compared to medicated. Suggestion of ↑ dopamine (D2) receptors in previously unmedicated patients
 - i. **Psychotic symptoms:** Gross distortions of reality
 - (1) **Disorganization** in thought, perception, emotion and dress. Clothing is inappropriate or absent; poor hygiene. Inability to

reason abstractly.

- (2) **Bizarre delusions:** False fixed beliefs that are not widely held within the context of the individual's cultural or religious group. They are usually persecutory, with religious overtones, or are of grandeur where they imagine themselves to be rich, important or powerful
- (3) **Hallucinations:** Sensory perceptions with no basis in reality. These are often auditory or visual
- (4) Loose associations or incoherence; blunted, flat, or inappropriate affect
- (5) Bizarre motor mannerisms - e.g., catatonic posturing or unresponsiveness
- (6) High risk for suicidal and homicidal behavior

4. **Types or forms**

- a. **Paranoid schizophrenia:** Patient is preoccupied with feelings of persecution. They often experience persecutory delusions and hallucinations. Paranoia often results from the patient's feelings of self-importance.
- b. **Disorganized schizophrenia:** The patient displays disorganized behavior, dress or speech; flat affect; come hallucinations and delusions
- c. **Undifferentiated:** Patients do not fit readily into another category
- d. **Residual:** At least one episode in the past, but no longer exhibiting the disorder
- e. **Catatonia – very rare**
 - (1) Co-morbid finding w/ autism
 - (2) Between 10% and 15% of adult patients with catatonia meet the criteria for schizophrenia
 - (3) Various infectious, neurologic, medical, and drug-related, and autoimmune conditions have been associated with catatonia
 - (4) Pt appears awake, but is unresponsive
 - (5) Assumes and remains in a fixed posture; unable to move or talk (mutism) or stupor of at least 1 hour duration
 - (6) **Management**
 - (a) Rx with benzodiazepine per OLMC
 - (b) Prevent harm to self or others
 - (c) Treat malnutrition, exhaustion, hyperpyrexia or injury

Case vignette of adolescent with catatonia

M is a 16-year-old adolescent who was in a good state of physical and mental health until he became preoccupied with food and the sinfulness of eating. These obsessions increased for several months, and one morning, M was found rigid in front of his computer with his arms extended outwards above his lap. Parents were initially unable to move M at all. With much prompting he was able to ambulate with physical assistance, but moved very slowly with ongoing staring, mutism, unresponsiveness, and frequent posturing. M was admitted to a psychiatric facility, diagnosed with catatonia and psychosis, and started on olanzapine and lorazepam, but then developed food refusal with resultant need for intravenous hydration. Olanzapine was discontinued and risperidone was begun with lorazepam ordered only on a PRN basis. Catatonic symptoms worsened rapidly, including posturing, mutism, stupor, rigidity, food refusal, and incontinence. Risperidone was discontinued with improvement lasting for a few days only. M then presented again to the emergence room with reduced responsiveness and speech other than utterances, prominent waxy flexibility, and posturing, and was re-admitted.

During this admission, a neurologic work-up was conducted and found to be negative. magnetic resonance imaging and electroencephalogram were both within normal limits. The urine toxicology screen was negative. Catatonic symptoms in M waxed and waned during the next 6 weeks when he continued to be treated with various low doses of lorazepam and risperidone. Typically, when doses of lorazepam were increased, catatonic symptoms quickly resolved and M requested several food items and ate them, moved readily around his room, and was able to engage in normal conversation. M reported feeling “really weird” and remembering wanting to move his limbs but being unable to do such. He also reported remembering thinking that he “could not and should not eat.” Risperidone and lithium carbonate were also prescribed to target psychosis as evidenced by ongoing discussions of demons and auditory hallucinations telling M not to eat, and to target potential underlying mania. When catatonic symptoms remained absent for 2 weeks, lorazepam was decreased to 1 mg TID; within days, M became unresponsive and mute, with posturing and waxy flexibility, incontinence, and food refusal, laying in bed immobile and purring all day. Agitation, incoherent yelling, aggression and self-barricading in the bathroom followed, as well as ongoing posturing episodes and sudden bursts of self-slapping behavior.

At this juncture, ECT was finally pursued due to the severity of impairment and clear lack of efficacy of psychotropics. All psychotropics were stopped. M received seven bilateral ECT treatments over the course of 14 days, resulting in complete remission of all catatonic, psychotic, and affective symptoms. ECT was terminated after seven treatments, yet within 4 days M began again to report vivid thoughts of religious character, delusions related to devils, and disturbed sleep. Parents refused further antipsychotic trials based on past poor response, and elected to return to ECT. The patient received a second course of five ECT treatments, with complete resolution of symptoms. M was discharged and continued with four outpatient ECT treatments once weekly followed by an additional four ECT treatments every other week. M has remained without psychiatric symptoms since stopping ECT 6 months ago, and was able to return to school (Catatonia in Childhood and Adolescence: Implications for the DSM-5. Dirk M. Dhossche, MD, PhD, Charmaine Wilson, MD, and Lee Elizabeth Wachtel, MD Primary Psychiatry. 2010;17(4):23-26)

5. **Management**

- a. Dealing with a psychotic patient is challenging. Reasoning with the patient is unlikely to be effective.
- b. Exhibit a calm, friendly, but distant and neutral attitude. Kindness and warmth may be misinterpreted as an attempt to gain the patient's confidence for ulterior motives. Maintain an emotional distance.
- c. Protect the patient and others. Maintain alertness for aggressive/violent behavior. Restrain if needed.
- d. Avoid touching the patient unnecessarily
- e. Involve people whom the patient trusts whenever possible
- f. Manage existing medical emergencies to the extent allowed by the patient. If they are urgently in need of medical or trauma care, treat by implied consent and sedate if necessary.

Severe anxiety or agitation and SBP \geq 90 (MAP \geq 65):

MIDAZOLAM 2 mg increments slow IVP q. 2 min (0.2 mg/kg IN) up to 10 mg prn titrated to patient response. If IV unable and IN contraindicated: IM dose 5-10 mg (0.1-0.2 mg/kg) max 10 mg single dose at 15 min intervals prn.

All routes: May repeat prn to a total of 20 mg if SBP \geq 90 (MAP \geq 65) unless contraindicated. Decrease total dose to 0.1 mg/kg if elderly, debilitated, chronic diseases (HF/COPD); and/or on opiates or CNS depressants.

Goal of sedation: “Pt arouses to voice and is resting comfortably on the cot.” Sedate patient to the point of **both** no longer being a danger to himself **and** no longer being a danger to others while being vigilant to ventilatory status.

- g. Bring in their meds if found. Observe for **extrapyramidal side effects** of the antipsychotic medications. These include: dystonia (impaired muscle tone), dyskinesia (a defect in voluntary movement), akathisia (inability to sit still), abnormal posture, excessive salivation, and other. To counter the undesired side effects of the antipsychotics, many patients are prescribed anticholinergic drugs such as benztropine mesylate (**Cogentin**) and trihexyphenidyl (**Artane**).
- h. If non-violent: transport is all that is required
- i. **Extrapyramidal symptoms**
 - (1) Dystonia: Impaired muscle tone; (head turned to side)
 - (2) Dyskinesia: Defect in voluntary movement
 - (3) Akathisia: Inability to sit still
 - (4) Abnormal posture excessive salivation
- j. Administer diphenhydramine 50 mg IVP.

E. Anxiety and related disorders

- 1. The mental status exam reveals signs of anxiety and fear but not those of psychosis or cognitive dysfunction. Anxiety is a normal response to stress. However, it can build to a point that fears and worry dominates the person's psychological life and overwhelms the person who then feels helpless and becomes dysfunctional.
- 2. Types
 - a. Panic disorders
 - b. Phobias
 - c. Posttraumatic syndrome
- 3. **Acute anxiety** frequently is related to certain physical symptoms. In addition to feelings of tension, restlessness, or dread, prominent symptoms may include tremulousness, abdominal cramps, diarrhea, headache, and hyperventilation syndrome (panic, dyspnea, paresthesias, dizziness, muscle spasm, and sometimes chest discomfort or syncope).
- 4. **Severe anxiety** disorder may manifest in a "**panic attack**". It is estimated that 3-10% of the population have experienced panic attacks. Women are twice as commonly affected as men, and the disorder tends to run in families. Most patients can identify the stressful event that preceded their first attack. Thereafter, the attacks may come on without any apparent precipitating stress. The symptoms usually peak in intensity within 10 minutes, and last about one hour.
 - a. **Typical clinical presentation:** Must see 4 or more of the following
 - (1) Surges of intense terror or extreme dread, accompanied by a feeling of impending doom. Symptoms develop over a few minutes and reach a peak in 10 minutes.
 - (2) Fear of going crazy, dying or losing control
Physical complaints are due to autonomic NS activation
 - (3) Headache, vertigo, faintness,
 - (4) Chest tightness or pain, palpitations
 - (5) Feelings of unreality (derealization) or depersonalization (detached from oneself)
 - (6) Trembling and shaking
 - (7) Sweating
 - (8) Sensation of shortness of breath, smothering; choking
 - (9) Hyperventilation syndrome
 - (10) Paresthesias
 - (11) Chills or hot flashes
 - (12) Hives
 - (13) Urinary frequency and diarrhea

b. **Management**

- (1) Carefully assess for an organic cause
- (2) Separate the patient from panicky bystanders
- (3) Be tolerant of patient's disability (the inability to cooperate or answer questions). Provide empathetic reassurance.
- (4) Encourage patient self-care to gain a sense of self-control
- (5) Hyperventilation is most effectively managed by coached breathing
- (6) After appropriate medical workup (e.g., ECG), the principal treatment is reassurance, with an explanation of how stress or anxiety can produce real physical symptoms. During acute panic states, drug therapy may be useful; psychiatric follow-up is important in preventing recurrence.

5. **Phobias**

- a. Normal fear is a feeling of alarm and discontentment in the expectation of a real danger.
- b. A phobia exists when a patient has transferred anxiety to a situation or object in the form of an **irrational, inexplicable, intense fear**. They usually recognize that the fear is unreasonable, but are unable to do anything about it.
 - (1) Places that are high: Acrophobia
 - (2) Open: Agoraphobia
 - (3) Enclosed: Claustrophobia
 - (4) Germs, crowds disease: Pathophobia
- c. **Management**
 - (1) It is unlikely that you will get a call because of a phobia.
 - (2) However, a phobia (elevators, enclosed spaces, stretcher straps, needles, blood, hospitals) may complicate management of a patient's other problems, i.e., chest pain, SOB, trauma.
 - (3) Rehearse each step of treatment in detail before it is carried out, then repeat the description as the action occurs.

6. **Posttraumatic syndrome**

- a. Assessment findings: Anxiety reaction to a severe psychosocial event
 - (1) Usually life-threatening, i.e., military service, rape, mass casualty event, observing mutilation or murder
 - (2) Repetitive, intrusive memories
 - (3) Anxiety reaction to severe psychosocial event
 - (4) Repetitive, intrusive memories
 - (5) Depression, sleep disturbance, nightmares
 - (6) Unexplained/unreasoned guilt / blame
 - (7) Attention deficits
 - (8) Easily startled
 - (9) Self-medicating, substance abuse
- b. Management
 - (1) Support and protect
 - (2) Transport for assistance

F. **Mood disorders**

1. **Mood:** A pervasive and sustained emotion that colors a person's perception of the world. Common examples of moods: Depression, elation, anger and anxiety. The main mood disorders are depression and bi-polar disorder.

2. Depression

- a. "Depression is well established as a major cause of morbidity and mortality worldwide. It is associated with a markedly shorter life span and an increased risk for several major medical disorders, including cardiovascular disease, cerebrovascular disease, and diabetes. Moreover, depression is associated with a much worse outcome in terms of disease severity and mortality. These findings, the high suicide rate associated with mood disorders, and the disability also associated with this common disorder speak to the need for effective treatments for depression" (Nemeroff, 2015).
- b. Depression affects 10-15% of the population at one point in their life and accounts for the majority of psychiatric referrals. It can be triggered by any number of events.
- c. "Major depressive disorder (MDD) can occur at any age, even in rare cases starting as young as preschool. The outward behavior of the person with depression often does not attract attention. However, major depression is disruptive in other ways, by causing people to withdraw from their relationships, from their work, and from the very fabric of society. In fact, major depression ranks as the largest cause of disability in the developed world. To make matters worse, researchers believe that more than half of people who succeed in committing suicide were suffering from depression at the time" (Mackie, 2013).
- d. There are several different theories regarding the cause of depression. These include: psychoanalytic, that it had its roots in earlier stages of development; biochemical, where there are chemical imbalances in the brain (↓ levels of serotonin); and interpersonal, where needs have been unmet.
- e. Differential diagnosis (Nemeroff, 2015)
 - (1) Is there a family history of unipolar or bipolar disorder?
 - (2) Does the patient fulfill diagnostic criteria for other psychiatric disorders, including (but not limited to) an anxiety disorder, eating disorder, late luteal phase dysphoric disorder?
 - (3) Has a major medical disorder been ruled out by laboratory testing, which should include thyroid function tests and measurements of testosterone and vitamins D and B12 levels? Medical diseases may produce symptoms of depression, including anemia and hypothyroidism.
 - (4) Has a thorough neurological examination been performed to rule out early Parkinson disease, Lewy body disease, and frontotemporal degeneration?
 - (5) Has neuropsychological testing been obtained to assess cognitive function?
 - (6) Is the disorder being treated with any medication that is associated with depression as a known adverse effect, such as glucocorticoids or alpha interferon?
 - (7) If the patient has never had a structural brain imaging study done using MRI, it should be seriously considered to rule out any occult CNS disorders.
 - (8) Depending on presentation of symptoms, sleep polysomnography may be used to rule out sleep apnea and other sleep disorders, and an electroencephalogram should be considered to rule out various forms

of epilepsy. Obstructive sleep apnea (OSA) has many overlapping symptoms with depression, and is increasingly recognized as an independent risk factor for hypertension and cardiovascular disease. It is crucial for mental health providers to remain vigilant in recognizing patients with signs and symptoms consistent with OSA.

- f. Symptoms during the onset of the first episode of major depression may not be obvious if it is brief or mild. Unrecognized or left untreated, however, it may recur with greater seriousness. Attacks of depression may have a gradual or rapid onset and be episodic with periods of remission and clustering of the episodes.
- g. Major depressive episode: When depression becomes prolonged or severe. This requires the patient to have exhibited at least of five or more of the following symptoms over a two-week period and show that this is a change from previous functioning. It must not be due to physiological effects of a substance or medication or a general medical condition such as hypothyroidism. It must also not be situation, related to bereavement.
 - (1) Persistent, unrelenting sadness or irritability; feelings of melancholy and helplessness and hopelessness
 - (2) Loss of interest and pleasure in usual activities and decreased ability to experience pleasure; must be prominent, persistent (not momentary mood shifts from day to day), and severe enough to impair daily functioning
 - (3) Crying easily
 - (4) ↓ appetite and weight loss, or ↑ appetite and weight gain
 - (5) Sleep disturbances; insomnia with very early waking or hypersomnia
 - (6) Psychomotor retardation or agitation
 - (7) Inability to concentrate or difficulty paying attention or with memory
 - (8) Fatigue, loss of energy, and multiple somatic complaints;
 - (9) Feelings of hopelessness, worthlessness, emptiness, self-reproach, pessimism, or guilt: may be of delusional proportions but are consistent with depression, not bizarre as in schizophrenia
 - (10) Recurrent **thoughts of suicide** or death - 15% risk
 - (11) No cognitive dysfunction suggesting delirium or dementia (distinguish depressive refusal to answer test questions from actual cognitive impairment)
- h. A depressive episode may develop gradually or affect a person quite suddenly, and it frequently is unrelated to current events in the person's life. Often, when all of those symptoms co-exist at a severe level for a long time, individuals become so discouraged and hopeless that death seems preferable to life.
 - (1) Depression in elderly tends to be chronic, has a low rate of recovery, and is often undertreated
 - (a) Elderly men have the highest suicide rate
 - (b) ~10% of adults, up to 8% of teens and 2% of preteens experience some kind of depressive disorder
- i. Zauszniewski's Depression Cognition Scale (DCS) asks individuals to respond to questions about helplessness, hopelessness, purposelessness, worthlessness, powerlessness, loneliness, emptiness and meaninglessness using a scale that ranges from "strongly agree" to "strongly disagree." In a study of 629 healthy adults from 42 states who

responded to questions through the Internet survey, they found the answer. Participants ranged in age from 21 to 84 years, and 70 percent were women; women make up the majority depression sufferers (Case Western Reserve, 2012).

- j. EMS personnel can use the screening mnemonic *In SAD CAGES* for major depression

- (1) **I**nterest
- (2) **S**leep
- (3) **A**ppetite
- (4) **D**epressed mood
- (5) **C**oncentration
- (6) **A**ctivity
- (7) **G**uilt
- (8) **E**nergy
- (9) **S**uicide

- k. **Management**

- (1) Assess for suicidal risk in ALL depressed patients.
- (2) Ask directly about suicidal thoughts. You will put ideas into their head. Patients are often relieved when it is brought up, as it gives them permission to talk about it.
- (3) Rule out organic causes, especially in patients over 40.
- (4) Most suffering from serious depression can be effectively treated on an out-patient basis and can return to their routine daily activities and experience relief from their symptoms. Many types of treatment are available, and the type chosen depends on the individual and the severity and patterns of the illness. There are three well-established types of treatment for depression: medications, psychotherapy, and electroconvulsive therapy (ECT) (Mackie, 2013).
 - (a) It often takes two to four weeks for medication such as antidepressants to start having an effect, and six to 12 weeks for antidepressants to have their full effect. In some cases, patients may have to try various doses and different antidepressants before finding the one or the combination that is most effective.
 - (b) Medications they may have prescribed
 - (i) **Serotonin reuptake inhibitors (SSRIs):** citalopram (Celexa), escitalopram (Lexapro), fluoxetine (Prozac), paroxetine (Paxil, Pexeva), and sertraline (Zoloft)
 - (ii) **Serotonin and norepinephrine reuptake inhibitors (SNRIs):** duloxetine (Cymbalta), venlafaxine (Effexor XR), and desvenlafaxine (Pristiq)
 - (iii) Bupropion (Wellbutrin) also marketed as Zyban as an aid to reduce nicotine cravings and withdrawal symptoms (precaution – drug-induced seizures); mirtazapine, Monoamine oxidase inhibitors (MAOI), or a tricyclic antidepressant (TCA)
 - (iv) A combination of an SSRI with either mirtazapine or bupropion has been reported to be effective.

- (v) Adding triiodothyronine (25 to 50 µg/d), lithium, or one of several atypical antipsychotics (aripiprazole, risperidone, quetiapine, or olanzapine) has also shown efficacy.
- (vi) Lurasidone and quetiapine have been FDA-approved for the treatment of bipolar depression.
- (c) Several types of psychotherapy have been shown to be effective for depression, including cognitive behavioral therapy (CBT) and interpersonal therapy (IPT). Mild to moderate depression can often be treated successfully with either medication or psychotherapy alone. However, severe depression appears more likely to respond to a combination of these two treatments. Cognitive-behavioral therapy (CBT) helps to change the negative thinking and behavior associated with depression while teaching people how to unlearn the behavioral patterns that contribute to their illness.
- (d) Above all, people with major depression need accurate diagnosis and early treatment. Family, friends, and coworkers should encourage a depressed person to seek expert evaluation. Those who are ill also need understanding, compassion, patience, and respect. Consumers and families should not feel afraid to seek expert advice early in the course of a depressive illness if they feel things are not improving.
- (e) Once treatment has begun, individuals may need help managing their medications, recognizing side effects, and observing changes in symptoms. Do not ignore remarks about suicide or death. Report them to the health care provider. Friends and family members who understand major depression are in the best position to help the person living with depression. Pointing out the effectiveness of treatments may be useful when feelings of hopelessness become intense (Macke, 2013).

G. **Major affective disorders**

1. Incidence: 1-2% of the population in any given year has a form of this disorder.
2. **Two types: bipolar disorder and unipolar (major or clinical) depression** consisting of depression alone. Bipolar disease causes tremendous mood swings from euphoria to debilitating depression. A patient is suffering a manic episode or a major depressive episode, depending on the direction of the mood swing.
 - a. Unlike thought disorders such as schizophrenia or psychosis, mood disorders primarily involve disruptions of feelings or mood. However, thinking problems and even psychosis can be present in severe depression or mania (Bohrer, 2001).
 - b. *The Diagnostic and Statistical Manual of Mental Disorders, 4th Edition* designates several categories of bipolar illness
 - (1) **Bipolar I:** Classic and most familiar form. Involves mania and major clinical depression significant enough to severely impair functioning. About 40%-50% of these are "mixed", a condition most accurately described by the older term *manic depression*. This is the only form of the disease that exhibits full mania. All other classifications demonstrate hypomania (less extreme and debilitating mania).

- (2) **Bipolar II:** Characterized by recurrent episodes of major depression alternating with hypomania. Often misdiagnosed as major depression because patients fail to see their hypomania as a problem or fail to recall it.
 - (3) **Cyclothymia:** Alternating episodes of hypomania and less severe depressive symptoms. Frequently missed diagnosis as symptoms are less severe.
 - (4) **Rapid cycling:** Refers to cases in which four or more episodes (either mania/hypomania or depression) occur in one year (Bohrer, 2001).
- c. Bipolar illness is affected by environmental and situation factors. It has genetic links. Mania and depression can be secondary to other medical conditions, e.g. electrolyte imbalance of calcium (extra intracellular Ca), disruption of neurotransmitters (particularly serotonin, norepinephrine, and dopamine); hypothyroidism; infections; and neoplasms. Common co-occurring psychiatric diagnoses are substance abuse/dependence, anxiety disorders including panic disorder and ADHD.
- d. Rate of suicide in bipolar I disorder is 10-15%. Close to half have a substance abuse problem.
- e. **Manic disorders:** Opposite of severe depression. Can last for weeks to months. People in a manic state typically lack insight and are viewed as out-of-control and a problem to society. They see no problem with feeling so good. Manic behavior, however, can result in shame, embarrassment, lowered self-esteem, and impaired relationships.
- (1) **Characteristics of manic episodes**
 - (a) Awake & alert, but easily distracted with ↓ concentration
 - (b) Activity (social, work or sexual) is markedly increased
Physically restless, ↑ motor activity, decreased need for sleep
 - (c) Euphoric or dysphoric (extreme emotional discomfort) mood (Can be treated with anti-anxiety meds like benzodiazepines)
 - (d) Speech is rapid, flight of ideas, racing thoughts
 - (e) Thoughts: inflated self-esteem, to point of grandiose delusions
 - (f) Memory may be distorted by delusions
 - (g) Orientation to time and place is commonly disturbed
 - (h) Perception may be disturbed by hallucinations (sensory experiences)
 - (i) Self-destructive activities - e.g., spending sprees, hypersexuality, foolish investments or projects, reckless driving, all inconsistent with previous behavior
 - (j) With severe impairment, bizarre delusions, hallucinations, and incoherence
 - (2) **Management**
 - (a) Consider the possibility of drug abuse, especially if this is a first "manic" episode.
 - (b) Patients experiencing a manic episode have a tendency to get themselves into trouble, driving recklessly, arguing or picking fights. Resist the impulse to feed into their loss of control. If patient is not violent, attempt to "talk down".

- (c) Keep sensory stimulation to a minimum
 - (d) Sit at eye level and talk matter-of-factly. Avoid discussion of delusional symptoms.
 - (e) *Pearl:* Manic patients can be humorous, whereas schizophrenic patients generally cannot.
- f. Pts. with major affective disorders usually function normally between acute episodes of mania or depression. By contrast, schizophrenic patients often appear abnormal or eccentric and function poorly between exacerbations. History assists diagnosis.

Various classes of medication are used to treat bipolar disorders: mood stabilizers, antidepressants, anti-anxiety drugs, and sometimes antipsychotics

Medication	Dose/range	Side effects/comments
Lithium carbonate Lithium citrate (liquid) (Eskalith, Lithobid-extended release forms)	600-2,400 mg/day	Increased thirst and urination, weight gain, tremor, GI upset, hypothyroidism Toxicity: Vomiting, diarrhea, poor coordination, weakness Comments: First line, least expensive, preferred for long-term monotherapy. Results in relief of symptoms in 40-78% of cases when taken as prescribed. May take 10-14 days to produce therapeutic effects for mania and four to six weeks for bipolar depression. Risk in pregnancy.
Valproic acid/Valproate/ divalproex (Depakote)	500-3,500 mg/day	Sedation, tremor, diarrhea, weight gain, hair loss Comments: Preferred over lithium for rapid cycling and mixed mania; pregnancy risk. Extended release available for once a day dosing. Zinc and selenium supplements often recommended if hair loss.
Carbamazepine (Tegretol) (Carbatrol-extended release)	200-1,800 mg/day	Double or blurred vision, fatigue, nausea, ataxia, may lower WBC count. Comments: Induces its own metabolism and that of some other drugs and competes for metabolizing liver enzymes, thereby increasing drug-drug interactions. Use with caution in pregnancy.
Other anticonvulsants used as adjuncts or in maintenance therapy: lamotrigine (Lamictal), topiramate (Topamax), gabapentin (Neurontin), and oxcarbazepine (Trileptal).		All but topiramate cause weight gain as a side effect.

H. **Somatoform disorders**

1. Physical symptoms that have no apparent physiological cause. Attributed to psychological factors. They believe their symptoms are serious and real. These disorders are difficult to diagnose.
 - a. **Somatization disorder:** Patient is preoccupied with physical symptoms
 - b. **Conversion disorder (hysteria):** Loss of sensory, motor, or special sense function without organic pathology. The individual suddenly cannot hear, see, feel, or move.

- c. **Hypochondriasis:** Exaggerated interpretation of physical symptoms as a serious illness
 - d. **Body dysmorphic disorder:** The person believes he or she has a defect in physical appearance
 - e. **Pain disorder:** The patient suffers pain, usually severe, that is unexplained by a physical ailment
 - 2. **Management:** Treat the symptoms as if they had a physical cause, since it is difficult to differentiate an organic dysfunction from one that is hysterical in origin.
- I. **Factitious disorders**
- 1. Often confused with somatoform disorders. Example: Munchausen syndrome.
 - 2. Must meet three criteria
 - a. An intentional production of physical or psychological S&S
 - b. Motivation for the behavior is to assume the "sick role"
 - c. External incentives for the behavior: economic gain, avoiding work, avoiding police, are absent.
- J. **Medical illness manifested psychiatrically**
- 1. Psychiatric emergencies due to medical illness or trauma typically look like delirium, i.e., an acute organic mental disorder that produces signs of cognitive dysfunction with or without disturbances in behavior, mood, or thought (occasionally the clinical picture will mimic functional psychosis without cognitive impairment).
 - 2. A frequent error is to neglect an adequate assessment and history in patients who already carry a psychiatric diagnosis and now have new symptoms, particularly impaired cognitive function.
 - 3. **Clues to an underlying medical or surgical cause:**
 - a. Personality change after age 40
 - b. Onset of psychiatric symptoms related in time to the onset or exacerbation of medical illness or trauma, or to a change in medications
 - c. Prominent cognitive dysfunction (disorientation, inattention, memory loss)
 - d. Hallucinations other than auditory
 - e. Brief or transient behavioral aberrations lasting minutes or hours (rule out psychomotor seizures or postictal states following major motor seizures).
 - 4. **Drug abuse**
 - a. **Alcohol**
 - (1) **Simple intoxication:** IMC unless the following occur:
 - (a) Deep coma with aspiration or impairment of ventilation.
 - (b) Descending consciousness; suspect mixture with other drugs or associated medical condition - e.g., trauma, hypoglycemia.
 - (c) Suicidal or assaultive risk; usually clears as alcohol is metabolized.
 - (d) Gross disorientation, confusion, agitation or bizarre psychotic thinking; this requires hospitalization on a psychiatric or medical unit for protection and diagnosis.
 - (e) Intoxication with medical complications of alcohol abuse (head trauma, gastrointestinal tract bleeding, pancreatitis).
 - (2) **Wernicke-Korsakoff syndrome:** confusion, memory deficit, ataxia, nystagmus, ocular palsies in a chronic drinker after a binge.
 - (3) **Alcohol withdrawal:** Escalating tremulousness, weakness, ataxia, confusion, agitation, delusions, visual or tactile hallucinations, seizures

b. **Opiates**

- (1) **Intoxication:** Naloxone and supportive care as indicated.
- (2) **Withdrawal:** uncomfortable but not dangerous; rarely requires admission; refer to methadone maintenance program for specialized treatment.

c. **Barbiturates and other sedative hypnotics**

- (1) **Intoxication:** usual supportive care
- (2) **Withdrawal:** resembles alcohol withdrawal with restlessness, diaphoresis, vomiting, tremors, ↓ BP, fever, potentially fatal seizures, or toxic psychosis.

d. **CNS stimulants (amphetamines, cocaine)**

- (1) **Intoxication:** Insomnia, euphoria or irritability, belligerence, panic reactions, paranoid ideation, hallucinations (especially visual and tactile), tachycardia, hypertension; eventually arrhythmias, fever, seizures, coma. The toxic psychosis may be indistinguishable from paranoid schizophrenia
- (2) **Withdrawal:** fatigue, weakness, hypersomnia; severe depression can be a complication, but it is treatable with cyclic antidepressants.

e. **Hallucinogens (LSD, PCP, Marijuana)**

- (1) Medical complications are relatively benign, but psychiatric ones can be severe and lethal - e.g., falls or accidents.
- (2) Mild "bad trip": extended period of intoxication, panic reactions.
- (3) **Severe intoxication:** toxic delirium with agitation, thought disorder, delusions, hallucinations. PCP produces extreme agitation and violence, plus neurologic findings. Death can result from violence or suicide. Acute renal failure from rhabdomyolysis reported.
- (4) **Specific management:** for mild bad trips, "talking down" often suffices; for severe reactions, will need to be admitted to a psychiatry service.

f. **Severity of drug overdoses**

Some over-the-counter medications have a far greater threat to the body than prescribed medications. For example, of the following: fluoxetine (Prozac), amitriptyline (Elavil), acetaminophen (Tylenol), and diazepam (Valium), the potential for serious complications in OD is as following:

- (1) #1 amitriptyline (Elavil)
- (2) #2 acetaminophen (Tylenol)
- (3) #3 diazepam (Valium)
- (4) #4 fluoxetine (Prozac)

K. **Dissociative disorders**

1. **Psychogenic amnesia:** Rather than being unable to recall or identify past events, these patients have buried the memories and are usually unwilling to retrieve them. Sometimes surfaced through hypnosis.
2. **Fugue state:** Person may actually flee miles from home while amnesic as a defense mechanism.
3. **Multiple personality disorder:** Patient reacts to stress by manifesting two or more complete systems of personality. Actually very rare.
4. **Depersonalization:** Occurs more in young adults. Patients experience a loss of sense of one's self. They feel "different". Perceive that they are someone else or that their body has taken on a different form (Bledsoe, 621). Often precipitated by an acute stress.

L. **Eating disorders**

1. Eating disorders are common, particularly among young people, and are associated with significant rates of morbidity and mortality.
2. The lifetime prevalence of anorexia nervosa is 1% among women and less than 0.5% among men. Bulimia nervosa is more common, with respective prevalence rates of 2% and 0.5%. Binge eating disorder, the newest eating disorder described in the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (DSM-5), has the highest lifetime prevalence rates of the 3 principal eating disorders: approximately 3.5% among women and 2% among men.
3. **Anorexia nervosa:** Disorder often diagnosed during early or middle adolescence, is marked by an intense fear of obesity. They see themselves as fat, even if wasting away so they won't eat. Suffer from weight loss (25% of body or more). This results in severe malnutrition, cessation of menses in women, and organ failure that can be fatal. Example: Karen Carpenter. Anorexia nervosa should be considered from the perspective of child and adolescent anorexia nervosa, anorexia nervosa in adults, and also severe and enduring anorexia nervosa, because the treatment approaches and the outcomes differ by clinically important ways (Hay et al, 2014).
4. **Bulimia nervosa:** Recurrent episodes of binge eating with self-induced vomiting or diarrhea, excessive exercise, or dieting. Bulimia nervosa and binge eating disorder are usually identified in later adolescence or in young adulthood. Person has full awareness that their behavior is abnormal. They often are perfectionists, have low self-esteem and social withdrawal. Example: Princess Diana.
5. Avoidant restrictive food intake disorder (ARFID)
6. Many patients may experience eating disorders for years, even decades, before being diagnosed appropriately. This is a tragedy, as 40% of adults with anorexia nervosa can make a full recovery with appropriate treatment for 5 years. At least 50% of patients with bulimia nervosa achieve full remission, and the results of treatment of binge eating disorder are even better.
7. EMS should be alert for a number of physiologic disturbances such as postural hypotension or electrolyte abnormalities. Get good baseline VS and glucose readings.

M. **Impulse control disorders**

1. **Kleptomania:** A recurrent failure to resist impulses to steal objects for immediate use or for their monetary value.
2. **Pyromania:** A recurrent failure to resist impulses to set fires
3. **Pathological gambling:** A chronic and progressive preoccupation with gambling and the urge to gamble. One of the most pervasive addictions in America today.
4. **Trichotillomania:** A recurrent impulse to pull out one's own hair
5. **Intermittent explosive disorder:** Recurrent and paroxysmal episodes of significant loss of control or aggressive responses (Bledsoe, 623).

N. **Personality disorders**

1. **Cluster A:** These persons act odd or eccentric.
 - a. Paranoid: Pattern of distrust and suspiciousness
 - b. Schizoid: Pattern of detachment from social relationships
 - c. Schizotypal: Pattern of acute discomfort in close relationships, cognitive distortions and eccentric behavior
2. **Cluster B:** Individuals often appear dramatic, emotional, or fearful.
 - a. Antisocial: Pattern of disregard for the rights of others
 - b. Borderline: Pattern of instability in interpersonal relationships, self-image, and impulsivity (see below for full explanation)

- c. **Histrionic:** Pattern of excessive emotions and attention seeking
 - d. **Narcissistic:** Pattern of grandiosity; need for admiration, and lack of empathy
- 3. **Cluster C:** Persons often appear anxious or fearful
 - a. **Avoidant:** Pattern of social inhibition, feelings of inadequacy, and hypersensitivity to criticism
 - b. **Dependent:** Pattern of submissive and clinging behavior related to an excessive need to be cared for
 - c. **Obsessive-compulsive disorder (OCD):** Pattern of preoccupation with orderliness, perfectionism, and control
- 4. **Notes on those with borderline personality disorder (bpd):**
 - a. Someone with borderline personality disorder (bpd) will be very prone to interpret rejection in all relationships. They will also seek to express and share that perception for a variety of possible motivations. They may be seeking to recruit sympathy or attempting to make someone acknowledge and soothe them from this pain. Again reality and their interpretation may not be the same but they have no ability to regulate or assess the validity of their feelings. To a patient with bpd, their suffering is central to their experience and interactions. They have no ability to process it, especially without help. The best response is to neutrally explain how support/care/love was given and try and help them think about that. Show them the contradicting information and let them struggle to resolve the paradox. Any emotional response, especially anger or being hurt by their statements will be interpreted by them as an attack---a statement that their feelings are wrong and they are being rejected again. They will lash out more and push even harder to prove and justify their pain.
 - b. Working with someone with these personality features can be very difficult whether in a therapy setting or just a personal relationship. The one word that best defines someone with BPD is instability. It spans across all arenas -relationships swing wildly from positive to negative. Their emotional state is reactive and unpredictable and internally they tend to have a very limited and poor sense of self (who they are, poor self-esteem, what they want, etc.) There is no sense of "core" or consistency that most people use to buffer the push and pull, bumps and bruises, joys and hassles or provocations of everyday life. So they react in all kinds of ways and in all directions to minor, seemingly insignificant things.
 - c. This kind of volatility usually makes others steer clear of them, which makes the borderline person more reactive. They tend to have very poor insight and control over their reactions, so they have no sense of how their behavior is causing conflicts and therefore see themselves as victims of these situations. They tend to externalize and blame others—people and situations—for the bad things in their lives. Some people with BPD do have some understanding of the role they play, but to admit that is too shaming or painful, so they lash out. They tend to be very lonely and usually very hurt if/when you can get them to admit it. The difficulty is in getting them to acknowledge that they contribute to and can play a role in either making things worse (and feeling worse about themselves and their lives) or in making changes in themselves. It is hard to walk that line without triggering them into being defensive and assuming the victim role and forcing/framing those trying to help as another rejecting attacker. The best friends and family can do is to show a consistent and calm response when they attack. Show them that you are not going to respond with aggression/hostility or rejection. They will then have to struggle with the idea that your intent may not be negative since you are passing up chances to attack.

- d. Engagement and building a relationship is tough with these clients/persons, but working on any other kind of interpersonal or relationship areas will not happen without it. This may be hard or close to impossible to do with someone the person already sees as an attacker. Borderlines cannot separate emotions, so if they have related to a person in one way, they may not be able to separate that out and put emotions aside and relate to the person in another way.
- e. Borderlines will test and spilt relationships. These separations foster anger, paranoia and distortions about motives. Simple clear consistency of boundaries is important. They can be framed as, "I need this for me" rather than, "I am doing this because of you" (because you are bad, mean, etc. which is how they will be predisposed to hearing it). It will also be important for people to remember that the borderline's reactivity and emotions are about them not you. Their children will likely have a hard time. A child will think that everything is their fault---"mom is mad all the time because I am bad"- is the simple version that a young child might think. They are likely to demonstrate all kinds of acting out behaviors based on the emotional confusion, guilt and anger they deal with as a result of a relationship with a borderline. Other relationships will tend to be tough for these kids as their model for what relationships are like are way off the normal spectrum in terms of functionally and appropriate emotional responses. They may also have problems in relationships as they seek out what they feel they are missing---a classic caricature would be the promiscuous girl who is desperate for affection. However, other more subtle complex presentations are much more realistic and common. The people around a borderline need to support each other in the boundaries they hold, the legitimacy and necessity of those boundaries, and in the coping with the emotional battle scars of trying to foster a relationship with a borderline.

III. **Life-threatening psychiatric conditions**

- A. **Suicide:** Any willful act designed to end one's own life. It is estimated that about 10% of the population has had serious suicidal thoughts. For every successful suicide, 10-40 attempts are made. It is the 3rd leading cause of death among 15-25 y/o age group, and the 4th leading cause of death among those 25-45 years. The CDC reports that the suicide rate for those 65 and older has risen by about 9% since 1980 after a 40-year decline. Women attempt suicide more often than men, but men are more likely to be successful.
 - 1. **Suicide methods**
 - a. Bullet wound (60%)
 - b. Poisoning (18%)
 - c. Strangulation (15%)
 - d. Cutting (1%)
 - e. Other, or unspecified (6%) (Bledsoe, 2006)
 - 2. **Risk factors**
 - a. Major depressive illness, schizophrenia, or delirium.
 - b. Sudden improvement in depression. The decision to commit suicide often leads to a sense of relief because they have found a way out of their situation.
 - c. Expression of suicidal thought/plan: 75% give warning of intent.
 - d. Advanced age (> 55)
 - e. Financial setback: unemployed, with no money or other resources
 - f. Loss of spouse or significant relationship
 - g. Social isolation - lack of family or friends for social support
 - h. Chronic, debilitating physical illness
 - i. Alcohol or drug abuse
 - j. Family history of suicide

- k. Previous serious attempt: 60% of successful suicides have a previous attempt.
- l. Immobilization and feeling of life impasse without solutions persisting after interview; no response to helpful advice, interventions, and referrals.

3. **Questions to ask**

- a. Have you ever thought that life was not worth living?
- b. Did you ever feel that you would be better off dead?
- c. Have you ever thought of harming yourself?
- d. Do you feel that was now?
- e. Do you have a plan of how you would carry it out?
- f. Do you have the things you need to carry it out?
- g. Have you ever tried to kill yourself before?
- h. Determine the specific nature of the plan. A well-organized, thought out plan is more dangerous than one that is vague or non-specific.
- i. Evaluate the lethality of the plan: \uparrow lethality = \uparrow risk. Determine if the patient has immediate access to the suicide device (is there a gun in the house?)

4. **Management**

- a. Protect the patient from harm. Gain access to the patient. This may require a forced entry. Once access is gained, never leave the patient alone.
- b. When a patient has attempted suicide, his medical condition takes priority. Treat per appropriate SOP.
- c. Do not trust rapid recoveries. The patient may claim to feel better, but still have suicidal intentions. Every suicidal gesture, act, or threat must be taken seriously.

B. **Homicidal risk** - factors associated with high risk:

- 1. Concrete plans and presentations.
- 2. Past history of violence - the best predictor.
- 3. Persecutory delusions with the potential victim seen as the main persecutor.
- 4. Intoxication or chronic use of drugs thought to stimulate or release violent behavior: alcohol, amphetamines, cocaine, or hallucinogens (PCP).
- 5. A provocative victim (e.g., spouse who goads patient with "you'd never have the guts" or repeatedly starts violent arguments).
- 6. Postpartum depression associated with risk of injury to the newborn.
- 7. Factors associated with loss of control: constant preoccupation with homicidal ideas, no concern about expected legal consequences, state of agitation or rage objectively evident; no response to the interview in terms of relaxation and increased control.

C. **Grave mental disability** (defined as a state of impaired judgment such that the patient is unable to provide for his basic needs of food, clothing, and shelter).

- 1. Many patients with functional psychosis or organic mental disorder are gravely disabled, but many are not and function quite well.
- 2. In contrast, persons without psychiatric illness who are under severe stress may occasionally develop acute panic reactions that disable them as much as a psychosis.
- 3. Assessment is carried out with attention to three sources of information:

- a. Mental status examination evidence of gross impairment in thought processes (looseness, incoherence), thought content (extensive delusions), perception (hallucinations), and especially cognitive functions (disorientation, confusion memory loss).
- b. Questions posed to the patient to test judgment. Inquire in detail about the patient's immediate plans. Where will he go after refusing care? How will he get there? How will he purchase or prepare a meal? Where will he sleep? Where will he obtain funds to live? If the answers are unintelligible or unconvincing, grave disability is presumed.
- c. Information from family, friends, and other professionals who know the patient; some seriously impaired patients may converse normally whereas collateral information reveals severe deterioration in life functioning.

IV. **Assessment**

A. **Scene size up**

1. **Determine if a violent or potentially unsafe situation exists**

- a. **Scene safety is our highest priority.** The scene evaluation should be taken very seriously. Assess the potential for violence on every call. If a dangerous situation is suspected, the patient should not be approached until the police have secured the scene. Even when the police have "secured" the scene, do not develop a false sense of security and a careless attitude.
- b. **Approaching the scene**
 - (1) Stand to side of door on latch side
 - (2) As door opens, quickly scan situation
 - (3) Observe surroundings; always position self for a safe exit
 - (4) Stand apart from each other at equal distances from patient
 - (5) Do not allow a single rescuer to remain with patient
- c. **Risk factors for violence**
 - (1) Locations with alcohol consumption
 - (2) Crowds
 - (3) Incidents where violence has already occurred (GSW, stabbing, domestic)
 - (4) Individuals under the influence of, or withdrawal from, drugs or alcohol
 - (5) Psychosis; especially manic and paranoid types
 - (6) Delirium from any cause, including hypoglycemia
- d. **Warning signals of a potentially violent situation:**
 - (1) Posture: people who sit tensely at the edge of a chair, or grip an arm rest
 - (2) Speech: loud, critical, threatening, profanity, or voice rising in pitch or volume
 - (3) Motor activity: inability to sit still, pacing, easily startled, ↑ muscular tension, jabbing the air with a pointed finger or fist
 - (4) Body language: clenched fists, turning away, avoidance of eye contact
 - (5) Subjective feelings: if you believe that you are in danger
- e. **General principles**
 - (1) Assess the entire situation. In the absence of obvious danger, observe scene for information to assist with patient assessment and care

- (a) Are there actual or potential factors which may contribute to the escalation of violence?
 - (b) Can they be removed or minimized?
 - (c) Evidence of substance abuse?
 - (d) General environmental condition
- (2) Observe your surroundings and maintain an escape route. Place yourself between the patient and the door.
 - (3) Maintain a safe distance between yourself and the patient. Stand to one side rather directly in front of the patient.
 - (4) If the patient is dangerous to himself or others and restraints appear necessary, try verbal de-escalation first. If the patient remains out of control, get sufficient help (1 for each limb) prior to applying physical restraints. Sometimes the show of force is sufficient to calm a patient.
 - (5) If the patient remains out of control, apply four point restraints using appropriate procedure (see procedure).
 - (6) Thoroughly document the verbal steps attempted prior to physical restraint, and the reasons why physical restraints were necessary on the run sheet.

B. Primary assessment

- 1. Limit number of people around patient, isolate patient if necessary.
- 2. Determine presence of life threatening medical conditions.
- 3. Rapid assessment of ABCs with interventions if required.
- 4. Observe overt behavior (affect) of patient and body language (posture, gestures).
- 5. Note evidence of rage, elation, hostility, depression, fear, anger, anxiety, confusion

C. Secondary assessment

- 1. Remove patient from crisis or disturbing situation
- 2. Use your thinking processes to evaluate someone else's thinking processes, your perceptions to evaluate someone else's perceptions, and your feelings to measure another's feelings.
- 3. When evaluating a patient with behavioral problems, virtually all of the diagnostic information must come from talking with the patient or other involved parties.
- 4. Voice and manner may influence a patient's condition as soon as you speak to him. Simply listening to the person describe the problem may help greatly. It is important to be aware of your own professional limitations and intervene only to the extent that you feel competent.

D. Interviewing techniques/principles

- 1. **Identify yourself clearly.** Tell the patient who you are and what you are going to do in an emotionally neutral tone of voice, without arguing. They may be suffering from low self-esteem. Be respectful. Do not shout at a patient in crisis. If the patient is confused you may have to repeat this at frequent intervals. They may be confused about what is real vs. imaginary. They may have difficulty in concentrating and following instructions. Be brief, simple, and straightforward.
- 2. **Respect the patient's personal space.** Do not touch the patient without first telling him or her what you are about to do.
- 3. Assess the patient wherever the emergency occurs if possible. Don't immediately change locations to one that may be a strange or intimidating place. Let the patient recover his bearings and begin to trust you in familiar surroundings.

4. **Exclude disruptive persons from the interview.** Remove the patient or the disturbing influence(s) from the immediate area. In most cases, this means interviewing the patient alone while relatives and bystanders are interviewed in another room. Some patients will become more anxious if separated from a significant other. If that person has a calming influence, ask that person to stay.
5. Avoid speaking with family members or bystanders in hushed or secretive tones.
6. Sit down, if possible, at a 45° angle to patient avoiding the "shadow zone"
7. Be prepared to spend time with a disturbed patient.
8. **Ask open-ended questions**, rather than questions that can be answered with a yes-no answer. They may have poor judgment, don't expect a rational discussion.
9. **Be as calm and as direct as possible.** Communicate self-confidence honesty, firmness, and a reasonable attitude. Disturbed patients are often afraid of losing self-control. Your behavior should indicate that you have confidence in their ability to maintain control. EMS should help the patient reestablish some self control. If you are anxious, the patient senses that the situation is indeed overwhelming.
10. Set the ground rules. Set clear limits and expectations. Let the patient know what you expect of him and what can be expected of you. "It's OK to scream, but we are not going to let you throw anything."
11. Let the patient tell their story in their own way. This enables you to begin assessing the patient's speech, affect, and thought processes. Gather only the information that is necessary for the prehospital management and transport of the patient, unless the person volunteers more.
12. Actively listen: demonstrated by facial expression, posture, and body responses. Encourage patient to communicate with comments such as, "Go on," "What happened after that?" Interrupt as little as possible, unless you must redirect disorganized communication. If patient makes a passing reference to something (i.e. suicide), wait until he finishes his thoughts, then further explore the previous reference. This tells the patient that you have been paying attention and would like to learn more.
13. **Confrontation** is pointing out to the patient something of interest in his conversation of which he may have been unaware. Confrontation describes how the patient appears to the interviewer, based on observations, not judgments. Comments such as, "You look sad," may elicit a freer expression of feelings.
14. **Do not be afraid of silence.** Maintain an attentive and relaxed attitude. Avoid the temptation to jump into a silence with a hasty response to forestall an expression of emotion. The expression of feelings is often therapeutic in itself. It is likely that the patient will feel better and will be able to express himself better after intense emotion has been relieved.
15. **Maintain a positive, nonjudgmental attitude.** Accept the patient's right to have his own feelings about things, and don't blame or criticize him for feeling as he does. Accept the person as ill and attribute symptoms to the illness. Don't take comments/actions personally.
16. Acknowledge and label the patient's feelings. Identifying feelings and giving them a name (fear, anger) helps the patient gain control over them.
17. **Don't argue.** If the pt misperceives reality, make a note of it, but do not try to talk the patient out of it. If a misperception is very frightening or distressing, it may be worth trying to provide a simple and accurate statement in a neutral tone of voice.
18. **Provide honest reassurance.** Give information that is truthful i.e., "Many people experience depression, but today there are effective treatments for those feelings." Avoid false reassurances i.e., "everything is going to be all right." Praise positive steps or behavior.

19. **Make a definite plan of action**, after the patient has finished telling his story and you have concluded your assessment. This gives the patient the feeling that something is being done to help, which relieves anxiety. People in crisis often need direction. Do not offer a wide range of decisions, "Do you want to go to the hospital or call your doctor?" State what you think is best, "I think it's important for you to go to the hospital now, there are doctors there that can help you." Be as consistent and predictable as possible.
20. If the patient is agitated, **encourage some motor activity**. Moving about often relieves anxiety. Let the patient do as much for himself as possible. Allow him to maintain dignity. Have the patient put on their own shoes and gather their coat.
21. **Stay with the patient at all times**. Once you have responded to an emergency, the patient's safety becomes your responsibility. Do not let the patient out of your sight.
22. Bring all the patient's medications with him or her to the hospital.
23. Never assume that it is impossible to talk with any patient until you have tried. Even the patient who sits mute may be hearing everything that you say.
24. Disorganized patients with uncontrolled, disconnected thoughts and incoherent, rambling speech (though often oriented to person and place) are often found wandering aimlessly, dressed peculiarly, and uttering meaningless sentences. It's rarely possible to get a thorough evaluation of such a persons, and the main objective is to get them to a hospital. They need structure and simple explanations of what is being done.
25. Disorientation may be characteristic of a variety of organic causes. Consider this in your differential diagnosis. Keep orienting the patient to day, time, location and what we are doing. Remind him of who you are and assure him that you are concerned for his safety.

E. Mental status examination

1. Before performing a mental status examination, obtain an adequate history from family and friends as well as the patient. This should include the following:
 - a. Presenting symptoms, precipitating factors, and chronology of events.
 - b. Associated symptoms (e.g., is the patient depressed? Is there also anorexia, weight loss, insomnia, or suicidal ideation?)
 - c. Prior psychiatric and medical hx; medications (legal and otherwise).
 - d. Situational resources: family, friends, physicians, counselors, and living arrangements. Knowledge of these greatly simplifies disposition.
2. Physical and neurologic exams should be done to r/o neuro-medical disorders.
3. **Cognition testing - cognitive (intellectual) function** is perhaps the most crucial factor in evaluating psychiatric patients. Impairment of cognition is reflective of organic mental disorders, many of which are due to medical, neurologic, pharmacologic, or surgical pathology. It is extremely important to evaluate cognitive function to accurately diagnose and treat the illness; many people have died because treatable medical or surgical illnesses were not considered when they had psychiatric symptoms.

Cognitive function testing includes evaluation of the following:

- a. **Level of consciousness**
 - b. **Orientation**
 - c. **Attention** or concentration
 - d. **Memory**
 - e. **Fund of information**; judgment
4. Psychiatric S&S are grouped into the systems that they affect: consciousness; motor activity; speech; thought; affect; memory; orientation; and perception. The components may be remembered by the mnemonic **CAST-A-MOP**.

Consciousness	The degree to which a person is aware of and attentive to the world around him. Observe the patient's ability to pay attention to the discussion; powers of concentration. The level of consciousness may vary from full alertness, through various levels of obtundation, to frank coma.
	Attention/concentration: When grossly impaired, wandering attention and distractibility are obvious. Subtle degrees of impairment are tested by asking the patient to repeat a series of numbers (a normal person can repeat six digits in the same order and four in the reverse order); simple two-digit arithmetic calculations can also be tested.
	Inattention - difficult to gain the patient's attention.
	Distractibility - attention is easily diverted.
	Confusion - impaired understanding of one's surroundings.
Activity - motor	May be increased, decreased or bizarre. Is the patient restless and agitated, pacing, sitting very still or barely moving? Is he making strange or repetitive movements?
	Restlessness - inability to sit still
	Agitation - restlessness in combination with extreme anxiety
	Retarded - movements are exceptionally slow
	Stereotyped activity - repetitive movements that don't seem to serve a useful purpose.
	Compulsions - repetitive actions that are carried out to relieve anxiety.
Speech	May be abnormally fast or slow. Note the rate, volume, articulation, and intonation of speech. Is the speech garbled or slurred? Is the patient using strange words? Slurred speech suggests an organic problem. Accelerated or retarded speech suggests an affective (emotional) disorder.
	Retardation - very slow speech; often seen in depressed persons
	Accelerated - words rapidly pour out
	Neologisms - words that the patient invents
	Echolalia - patient echoes the words of the examiner
	Mute - patient doesn't speak at all
Thought content	Thinking is the highest of mental functions. It requires integration of knowledge, perception, and memory. It may be disordered in its progression or content. Listen to the patient's story. What is on his mind? Is he making sense? Is there anything unusual about his reasoning? Is he expressing apparently false ideas (delusions)? Fund of information: The patient should have a knowledge appropriate to his age and social situation. Information can include current events, political figures or others in the news, or local geography.
	Abnormal thought processes:
	Flight of ideas - Accelerated thinking, the mind skips so rapidly from one idea to another, that the listener is unable to grasp the relationship between them.
	Retardation of thought - Often seen in depression, the patient seems to take a very long time to get from one thought to the next.
	Circumstantial thinking - The patient includes many irrelevant details.
	Perseveration - Repeating the same idea over and over again.
	Delusions - Fixed false beliefs that are not shared by others and are not amenable to change via persuasion or evidence or by reasonable explanation. Types are persecutory, grandiose, somatic, and depressive. Delusions of persecution are when one believes that others are plotting against him. Delusions of grandeur are when one believes himself to be of great importance.
	Obsessions - Thoughts that won't go away, despite attempts to forget them.
	Phobias - Obsessive, irrational fears of specific things or situations, such as heights, open or closed spaces.

Thinking/Thought Processes cont.	<p>Looseness of associations - Varying degrees of slippage in logical connections, from mild rambling (tangential or circumstantial speech) to incoherence ("word salad") - as opposed to normal goal-directed conversation (note that apparent looseness may result from memory dysfunction in cases of organic mental disorders). Looseness should be distinguished from flight of ideas or pressured speech in mania (fast but understandable if one slows the patient down). Various types of faulty logic may also be seen.</p> <p>Abnormal thought content: Ideas of reference: Interpreting events falsely as related to oneself. "The TV anchorman is sending me personal messages during his show." Feelings of influence: Belief that one's thoughts or actions are controlled by other persons or uncanny forces. Thought broadcasting: The belief that one's thoughts are audible or that one's mind can be read. Thought control: Belief that outside forces are controlling one's thoughts. Somatic preoccupations: Unrealistic concern with the body or fear of disease that is not responsive to facts or reassurance. Derealization: Feeling that the world is unreal, as if in a dream. Depersonalization: Feeling that oneself is unreal - e.g., an inanimate object. Suicidal thoughts: Inquire about these in every depressed patient. Homicidal thoughts: Feeling that you are being told to kill someone.</p>
Affect and Mood	<p>Mood - A person's sustained and pervasive emotional state, may be described as depressed, euphoric (elation), hostile, withdrawn, suspicious, "speeding", or anxious. It may be most apparent in body language. The patient sitting with shoulders drooped and head bent, conveys depression.</p> <p>Affect - The outward expression of a person's mood, is described as appropriate or inappropriate, and labile or flat. Labile - Rapid change, one minute laughing, the next crying. Flat - The appearance of being disinterested, often lacking facial expression. The patient doesn't seem to feel much of anything.</p>
Memory	<p>An impression can be formed by listening to the patient's reconstruction of events. Immediate memory: Say the names of three unrelated objects and asking the patient to repeat them (tests registration). A few minutes later ask the patient if he can remember the three words (tests retention and recall). The patient should be able to remember these at 1-and 5-minute intervals. Recent memory is tested by asking the patient about events of the last few hours or days; confabulation is ruled out by asking the same question more than once. Remote memory is reflected in the capacity to give a PMH; the examiner should be sure that failure is due to inability to remember as opposed to lack of interest or cooperation.</p> <p>Registration - Ability to add new information.</p> <p>Retention - Ability to store information in an accessible place in the mind.</p> <p>Recall - Ability to retrieve a specific piece of information.</p> <p>Recognition - Ability to identify information.</p> <p>Confabulation - Explanations used to fill gaps in memory.</p> <p>Amnesia - Loss of memory.</p>
Orientation	<p>Impaired orientation indicates severe cognitive dysfunction; however, the presence of orientation x 4 does not rule out organic mental disorder; person - a person's sense of who he is; place - where he is; time - year, season, month, day of week.</p>
Perception	<p>Illusion - False interpretations of actual perceptions - e.g., belief that a passing cloud represents a radioactive vapor or mistaking rope for snake.</p> <p>Hallucinations - False sensory perceptions in the absence of an external stimulus. Auditory are most common in schizophrenia. Visual, gustatory, olfactory, or tactile are most common in organic mental disorders, including drug intoxications. If present, assume an organic cause until proven otherwise.</p>

F. Emergency management of psychiatric patients

1. Ensure protection of the patient and the paramedic

2. **Rule out serious medical illness that is manifested psychiatrically**
 3. **Rule out life-threatening psychiatric conditions**
 - a. Suicidal risk
 - b. Homicidal or assaultive risk
 - c. Grave mental disability
 - G. Decisions are made primarily on the basis of the history, physical, and neurologic exam and mental status exam. The latter is crucial; it will enable the examiner to distinguish between psychiatric presentations that require medical, neurologic, or surgical treatment and those that require only psychiatric treatment.
 - H. **See NWC EMSS SOP: Psychological emergencies**
- V. **Differential diagnosis and disposition**
- A. **Differential diagnosis**
 1. The essential distinctions rest between the following:
 - a. psychotic vs. non-psychotic,
 - b. organic mental disorder vs. functional psychosis, and
 - c. delirium vs. dementia.
 2. The distinction between psychosis and non-psychosis is frequently made intuitively when the patient is severely disturbed. The psychotic patient is recognized by his thought disorder, gross confusion, or inappropriate, bizarre, or unexpected behavior. In questionable cases, the best way to elicit psychotic dysfunction is to permit the patient to speak freely, encouraging him with broad-focused questions.
 3. Once a patient is determined to be psychotic, the distinction must be made between organic (delirium or dementia) and functional (schizophrenia or affective) disorders. This distinction rests solely on the findings of cognitive dysfunction (consciousness, orientation, attention, memory, fund of information, and abstraction). The mental status exam should never be omitted with any seriously disturbed patient. Misdiagnosis in either direction may result in grossly inappropriate treatment.
 4. If cognitive testing reveals the patient to have an organic mental disorder, the distinction between acute (delirium) and chronic (dementia) is made by history; this may require collateral history from others.
 5. If the patient is found to have functional psychosis, further distinction is made between schizophrenia, mania, and major depression with the help of history and the mental status exam.
 - a. If the disturbance recurs as discrete episodes lasting weeks → months, with excellent function between it is probably an affective disorder (mania or depression).
 - b. If the patient has residual symptoms or signs and poor functioning between acute episodes, the disturbance is probably schizophrenia.
 - c. A number of medical illnesses and drugs produce "secondary" depression, mania or psychosis, rather than the strictly "functional" type, and these should always be considered.
 6. In a non-psychotic patient, further diagnostic distinctions are made by history; except for the highly agitated patient who will require some verbal management and possibly a few doses of sedative medication. The major goal with such patients is correct triage and referral for psychotherapy, special treatment programs, social services, or psychiatric hospitalization in the case of suicidal or homicidal ideation.
 7. **Diagnosis in the elderly:** One should always maintain a high index of suspicion of organic mental disorders. The major pitfall with the elderly is failing to distinguish major depression from dementia. Although affective symptoms such as depression or anxiety may occur in patients with dementia, elderly patients with major

depression may be too inert and unmotivated to make any effort to answer cognitive test questions and thus be mistakenly diagnosed as demented. Such patients with "pseudo-dementia" may then be denied effective antidepressant drugs - or worse, be consigned to a nursing home or a state hospital. These facts again emphasize the importance of adequate cognitive testing in the elderly.

B. Disposition

1. Indications for medical hospitalization

- a. Delirium due to medical illness, trauma, or unknown cause
- b. Serious drug intoxication
- c. Withdrawal from alcohol, barbiturates, or other sedative hypnotics
- d. Certain illnesses manifesting themselves psychiatrically e.g., endocrine or metabolic encephalopathies or temporal lobe epilepsy.

2. Indications for urgent (involuntary if necessary) psychiatric hospitalization:

- a. Suicidal risk
- b. Homicidal or assaultive risk
- c. Grave mental disability
- d. Initial presentation of acute behavioral changes in an elderly patient

3. Indications for elective psychiatric hospitalization depend on the individual's medical, emotional, and social situation.

VI. Tasers – See SOP

- A. In rare situations, it may be necessary for law enforcement to apply restraint techniques not sanctioned by EMS policies (pepper spray, mace, tasers, stun batons, and telescoping steel batons).
- B. **Taser** is the name brand of a line of devices produced by TASER International. These battery- powered devices deliver a low current, high voltage electrical charge intended to incapacitate via involuntary muscle contraction. They are used primarily when suspects are unarmed and violently resisting arrest or demonstrating behavior likely to harm themselves or others.
- C. Compressed nitrogen gas is used to propel 2 electrode-tipped barbs at a velocity of 170 feet/sec. In comparison a .22 caliber rifle bullet has a muzzle velocity of 1,100 ft/sec. Paintball guns propel at about 200 ft/sec. Barbs are attached to the device by thin wires and travel about 18-25 feet. They are actually a straight #8 fishhook, 4 mm (¼ inch) long (entire shaft is 9.5 mm long). Barbs may attach to clothing and not even penetrate the skin, but the impulse can conduct through up to 2" of clothing.
- D. Tasers are equipped with a laser light and are usually aimed at the torso. If the circuit is completed, a series of very brief (6-12 microsecond) electrical pulses is produced at about 15 pulses/sec for 5 seconds. Each pulse delivers 0.36-1.76 J or 26 watts. The shock can be terminated early by the operator, or additional shocks can be delivered by pulling trigger again.
- E. The device can give up to 50,000 volts in rapid pulses during a 5 sec period. Average current is 2.1 mA (compare that to transcutaneous pacing thresholds). The sensation is acutely uncomfortable and usually causes tetany of large muscle groups.
- F. Symptoms resolve immediately upon cessation of electrical shock. There is no loss of consciousness and no alteration in awareness during shock. Subjects often fall during or just after use of weapon, so they should be assessed for secondary injuries.
- G. **Taser advantages:**
 1. 95% effective
 2. Lower injury rate compared to other less than lethal weapons
 3. Fewer officer injuries
 4. Reduced personnel & departmental liability

5. **Assessment & Mgt of the tased person** should include the following:
 - a. Scene size up: confer with police; determine pt's condition before, during & after taser discharge
 - b. **ITC special considerations**
 - (1) 12 L ECG If pt has S&S that could be cardiac in nature, is elderly, or has hx of CVD or drug use. Product literature from the manufacturer reports that tasers will not damage pacemakers.
 - (2) VS; Assess for hyperthermia; volume depletion; tachycardia (hypersympathetic state); metabolic acidosis
 - (3) IV NS to correct volume depletion if present
 - c. **Secondary assessment:**
 - (1) SAMPLE Hx: Date of last tetanus prophylaxis; cardiac hx; ingestion of mind altering stimulants (PCP, cocaine)
 - (2) Tased individuals can have injury or illness that occurs before taser event and/or injury when they are tased and fall
 - b. Assess for **excited delirium**: agitation, excitability, paranoia, aggression; great strength; numbness to pain; violent behavior. Apply/maintain **restraints** if needed
 - c. Severe anxiety or agitation and SBP ≥ 90 (MAP ≥ 65): **MIDAZOLAM** 2 mg increments slow IVP q. 2 min (0.2 mg/kg IN) up to 10 mg prn titrated to patient response. If IV unable and IN contraindicated: IM dose 5-10 mg (0.1-0.2 mg/kg) max 10 mg single dose at 15 min intervals prn. All routes: May repeat prn to a total of 20 mg if SBP ≥ 90 (MAP ≥ 65) unless contraindicated. Decrease total dose to 0.1 mg/kg if elderly, debilitated, chronic diseases (HF/COPD); and/or on opiates or CNS depressants
 - d. Identify location of and care for PROBES per local procedure
2. **Care of patient with embedded taser probes:** Taser probes usually produce only minor puncture wounds if they penetrate the skin. They pose no significant risk to lungs, heart, or bowel. There is a theoretical risk to superficial neck vessels and genitals, but no cases of significant injury have been reported. Isolated eye injuries have occurred, requiring surgical intervention. Minor punctuate burns are possible from arcing near probe location.

If a probe is embedded in the eye, face, neck groin, or spinal column, EMS should NOT remove them. The probe should be secured, and the patient transported for evaluation and removal at the hospital. If the probe is located in an area that is not mentioned above it sometimes can be removed by EMS depending on local protocol. Use the following technique:

 - a. Place one hand on the patient in the area where the probe is embedded.
 - b. Stretch the skin around the puncture site. Place your other hand firmly around the probe.
 - c. In one fluid movement, pull the probe backwards in the same plane as it entered. Assure that it is intact & no portion remains in the skin. Apply direct pressure to the wound.
 - d. Cleanse puncture sites and bandage as appropriate
3. **Disposition of taser probes:** If you remove the probe, check with law enforcement to see if they require that the probe be kept as evidence. If not, dispose of the probe in a sharps container.
4. **Disposition of the tased patient:** Every tased patient should be transported for further evaluation. If the person is decisional and wishes to refuse treatment and/or transport, they should be advised to seek medical attention immediately if they experience any abnormal signs or symptoms. If patient has not had tetanus immunization in the last 5 yrs, advise to acquire it. Provide disclosure of risk and obtain signature on refusal form. Contact on-line medical control from point of patient contact prior to executing the refusal.

- B. ***Excited delirium:*** Excited delirium is defined as a state of agitation, excitability, paranoia, aggression, great strength and numbness to pain, progressing to violent behavior. It is accompanied by tachycardia, hyperthermia, metabolic acidosis, and hyperkalemia and can be precipitated by use of stimulants such as cocaine, methamphetamine, cannabinoids, or LSD.
1. Patients with excited delirium may have an underlying psychiatric disorder. These patients can be very difficult to subdue and need to be detained for their safety and the safety of others.
 2. A typical pattern of response for these patients begins with a state of extreme agitation, violent struggle with police while in custody, then abrupt quiet, typically due to respiratory arrest.
 3. Preexisting heart disease, when combined with stimulant use, struggle with law enforcement, and definitive restraint maneuvers (Taser or others) creates a high-risk situation for restraint-related fatalities. Extreme vigilance on the part of EMS is required for recognition of the signs and symptoms and prompt action.
 4. Physiologic indicators include:
 - a. Hyperthermia
 - b. Tachycardia (hypersympathetic state)
 - c. Volume depletion
 - d. Metabolic acidosis
 - e. Rhabdomyolysis at hospital
 5. ***Treatment of excited delirium:*** Management of the patient with excited delirium revolves around supportive care, continuous ECG and SpO2 monitoring, sedation with benzodiazepines, and IV fluids to correct volume depletion.
- C. ***Reportable conditions:*** Death of a patient in restraints or after administration of sedatives by EMS personnel for combative behavior shall be **reported to the EMS MD** within two hours so he can investigate and report to the appropriate regulatory bodies.

Psychotropic Medications		
Anti-psychotic		
acetophenazine (Tindal)	chlorpromazine (Thorazine)	chlorprothixene (Taractan)
droperidol (Inapsine)	fluphenazine (Prolixin, Permitil)	haldoperidol (Haldol)
loxapine (Loxitane, Daxilin)	mesoridazine (Serentil)	molindone (Moban)
perphenazine (Trilafon)	pimozide (Orap)	thiothixene (Navane)
thioridazine (Mellaril)	trifluoperazine (Stelazine)	triflupromazine (Vesprin)
olanzapine (Zyprexa)	clozapine (Clozaril)	risperidone (Risperdal)
quetiapine (Seroquel)	ziprasidone (Geodon)	
Tranquilizers		
Benzodiazepines: may cause psychological or physical dependence. Reduction of cessation of benzodiazepines may lead to anxiety, insomnia, gastrointestinal discomfort, anorexia, diaphoresis, photophobia, or increased sensitivity to noise. More severe symptoms may include confusion, depersonalization, myoclonus, delirium, psychosis, or seizures.		
alprazolam (Xanax)	chlordiazepoxide (Librium)	clonazepam (Klonopin)
clorazepate (Tranxene)	diazepam (Valium)	flurazepam (Dalmane)
halazepam (Paxipam)	lorazepam (Ativan)	oxazepam (Serax)
prazepam (Centrax)	temazepam (Ristoril)	triazolam (Halcion)
chlordiazepoxide & clidinium bromide (Librax)		
Barbiturates		
amobarbital (Amytal)	butabarbital (Bustisol)	pentobarbital (Nembutal)
phenobarbital (Luminal)	secobarbital (Seconal)	glutethimide (Doriden)
methyprylon (Nodular)	meprobamate (Equanil, Miltown)	
Antihistamines (Used to control extrapyramidal side effects caused by some of the drugs)		
diphenhydramine (Benadryl)	hydroxyzine (Atarax, Vistaril)	promethazine (Phenergan)
Miscellaneous		
chloral hydrate (Noctec) ethchlorvynol (Placidyl)		
benztropine (Cogentin): anticholinergic used to control EPS effects of anti-psychotics		
Ambien: (sedative-hypnotic used to treat insomnia): Withdrawal of ambien may be associated with the following symptoms: fatigue, nausea, emesis, stomach cramps, flushing, lightheadedness, uncontrolled crying, nervousness, and panic attack. Patients may become dependence on ambient.		
Antidepressants		
Cyclic antidepressants		
amitriptyline (Amitril, Endep, Elavil)	amoxipine (Ascendin)	
amitriptyline + chlordiazepoxide (Limbitrol)	doepin (Adapin, Sinequan)	
perphenazine-amitriptyline (Triavil)	nortriptyline (Aventyl, Pamelor)	
desipramine (Norpramin)		
imapramine (Imavate, Janimine, Pramine, Presamine, Tofranil)		
MAO Inhibitors		
isocarboxazid (Marplan)	phenelamine (Nardil)	tranylcypromine (Parnate)
Serotonin reuptake inhibitors (SSRIs): Abrupt discontinuation may cause dizziness, sensory disturbances (paresthesias such as electric shock sensations), agitation anxiety, nausea, and sweating. Similar events reported for other SSRIs. SSRIs may produce akathisia, a condition of extreme restlessness, irritability, agitation, and inability to control impulses. It occurs in up to 10-25 % of Prozac users. Akathisia is often associated with withdrawal symptoms: insomnia, tremors, weight loss, nausea, and diarrhea, and can be accompanied by suicidal or homicidal thoughts or acts.		
fluoxetine (Prozac, Zoloft)	citalopram HBr (Celexa)	paroxetine (Paxil)
Miscellaneous:		
bupropion (Wellbutrin)	trazodone (Desyrel)	venlafaxine (Effexor)
Mania		
lithium (Eskalith, Lithane, Lithobid, Lithonate, Lithotabs, Cibalith)		carbamazepine (Tegretol)
divalproex (Depakote)		

Abilify (aripiprazole)	Classification: antipsychotic drug (atypical type). Used to treat certain mental/mood disorders (such as bipolar disorder, schizophrenia, Tourette's disorder, and irritability associated with autistic disorder). It may also be used in combination with other medication to treat depression. It works by helping to restore the balance of certain natural chemicals in the brain (neurotransmitters). This medication can decrease hallucinations and improve concentration. It helps pts to think more clearly and positively about themselves, feel less nervous, and take a more active part in everyday life. It can treat severe mood swings and decrease how often mood swings occur.
Clomipramine	Classification: tricyclic antidepressant. Used to treat obsessive compulsive disorder (OCD). It helps decrease persistent/unwanted thoughts (obsessions), and it helps reduce the urge to perform repeated tasks (compulsions such as hand-washing, counting, checking) that interfere with daily living.. It works by restoring the balance of certain natural substances (serotonin, among others) in the brain.
Duloxetine	Classification: serotonin-norepinephrine reuptake inhibitor (SNRI). Used to treat depression and anxiety. In addition, is used to help relieve nerve pain (peripheral neuropathy) in people with diabetes or ongoing pain due to medical conditions such as arthritis, chronic back pain, or fibromyalgia (a condition that causes widespread pain). May improve mood, sleep, appetite, and energy level, and decrease nervousness. Works by helping to restore the balance of certain natural substances (serotonin and norepinephrine) in the brain.
Invega Sustenna (paliperidone palmitate)	Classification: antipsychotic drug (atypical type). Used to treat certain mental/mood disorders (such as schizophrenia, schizoaffective disorder). It works by helping to restore the balance of neurotransmitters in the brain. This medication can decrease hallucinations and help the patient to think more clearly and positively about themselves, feel less agitated, and take a more active part in everyday life.

References

- Bledsoe, B.E., Porter, R.S., & Cherry, R.A. (2006). In Bledsoe et al. *Paramedic Care: Principles & Practice Vol. 3*. Upper Saddle River: Brady.
- Bohrer, G.J. (2001). Going to extremes: The difficulties of living with bipolar illness. *Nurse Week*, 2(7), 18-19.
- Case Western Reserve University. (2012, April 6). "Study identifies point when negative thoughts turn into depression." *Medical News Today*. Retrieved from <http://www.medicalnewstoday.com/releases/243779.php>.
- Gussow, L. (2015). Toxicology rounds: Drug-induced seizures? Think bupropion. *Emergency Medicine News*, 37(6), 3. Accessed on line: http://journals.lww.com/em-news/Fulltext/2015/06000/Toxicology_Rounds_Drug_Induced_Seizures_Think.5.aspx doi: 10.1097/01.EEM.0000466614.55252.4c
- Hay, P. et al. (2014). Royal Australian and New Zealand College of Psychiatrists clinical practice guidelines for the treatment of eating disorders. *Aust N Z J Psychiatry*. 48(11), 977-1008; doi: 10.1177/0004867414555814.
- Khawaja, I.S., et al. (2015). Obstructive sleep apnea: An update for mental health providers. *Psychiatric Annals*, accessed on line 2-20-15: <http://www.mdlinx.com>
- LeBel, J. (January, 2003). EMS knowledge and comfort with psychological problems. *Prehospital Perspectives*.
- Mackie, B. (2013). *Eternal High DVD – Discussion Guide*
- National Alliance on Mental Illness (NAMI) web site (www.nami.org)
- National Institute of Mental Health. (2000). *Bipolar Disorder Research Fact Sheet*. Washington D.C.: National Institutes of Health, National Institute of Mental Health. Available: www.nimh.nih.gov/publicat/bipolarresfact.cfm.
- Nemeroff, C.B. (2015). The latest on treatment-resistant depression. *Psychiatric Times*. Accessed on line June 22, 2015 at: <http://www.psychiatrictimes.com/apa-2015-MDD/latest-treatment-resistant-depression>.
- Nock, M.K; Greif Green, J.; Hwang, I. McLaughlin, K.A.; Sampson, N.A.; Zaslavsky, A.M., Kessler, R.C. (2013). Prevalence, correlates, and treatment of lifetime suicidal behavior among adolescents. *JAMA Psychiatry*, published online January 9, 2013.doi:10.1001/2013.jamapsychiatry.55
- Oji, V. (2010). Mind, medications & mental disorders: A spiritual approach. *JCN*, 27(2), 76-83.
- Schizophrenia Working Group of the Psychiatric Genomics Consortium. (2014). Biological insights from 108 schizophrenia-associated genetic loci. *Nature*, 511, 421-427.

Homework questions

1. Which of these describes a person's observable conduct and activity?
 - A. Makeup
 - B. Affect
 - C. Behavior
 - D. Socialization
2. Define behavioral emergency:
3. Which of these IS NOT a general cause of behavioral emergencies?
 - A. Social (situational)
 - B. Psychosocial (personal)
 - C. Genetic (DNA)
 - D. Biological (organic)
4. Conditions related to a patient's personality style, dynamics or unresolved conflict or crisis management methods are classified as
 - A. psychosocial.
 - B. sociocultural.
 - C. biological/organic.
 - D. sociobehavioral.
5. Which of these should take first priority on calls involving behavioral emergencies?
 - A. The number of patients
 - B. The chief complaint
 - C. Scene safety
 - D. The patient's level of consciousness
6. Which of these is appropriate when a paramedic is faced with a violent patient with a weapon?
 - A. Immediately take the weapon from the patient.
 - B. Have your partner assist you in "taking down" the patient.
 - C. Ask a family member to take the weapon from the patient.
 - D. Request law enforcement assistance.
7. A patient who has a feeling of alarm and discontentment in the expectation of danger is said to be
 - A. confused.
 - B. fearful.
 - C. in a rage.
 - D. anxious.
8. Which of these is appropriate when assessing a patient with a behavioral emergency?
 - A. Stand close to the patient so he must focus on you.
 - B. Position yourself at a higher level than the patient, so he must look up at you.
 - C. Use silence wisely when gathering patient information.
 - D. Spend as little time on-scene as possible; proper treatment will only begin at the hospital.
10. What interviewing technique should be used with a patient with a behavioral emergency?
 - A. Ask closed ended questions
 - B. Take the family aside and talk to them quietly so the patient cannot overhear
 - C. Sit down at an angle to the patient
 - D. Abbreviate the history so you can transport expeditiously

11. What approach usually works best when dealing with a patient with a behavioral emergency?
- A. Bring a show of force to induce cooperation
 - B. Do not allow the patient choices as they cannot make rational decisions.
 - C. Affirm your confidence that they can maintain control.
 - D. Use a “good cop” / “bad cop” approach so they are intimidated to cooperate.

12. Which of these is an example of an organic cognitive disorder?

- A. Delirium
- B. Delusions
- C. Anxiety disorder
- D. Post-traumatic stress

13. List three medical diseases that can manifest themselves as psychiatric disorders.

14. List 4 risk factors for violence:

15. List three warning signals of a potentially violent situation:

16. List 2 things that should be inspected about the scene to give clues as to the cause of a behavioral emergency.

17. Which room of the house should be avoided when assessing a patient with a behavioral emergency?

18. Where should a patient with a behavioral emergency be assessed?

- A. In the ambulance
- B. At the point of patient contact

19. How should a paramedic maintain an escape route when dealing with a potentially violent patient?

20. Describe 4 verbal communication techniques useful in interviewing a patient with emotional illness.

21. List and discuss the components of a mental status exam using the mnemonic CAST-A-MOP:

C:

A:

S:

T:

A:

M:

O:

P:

22. What 3 elements must be assessed and documented when determining a patient's decisional capacity?

23. What is a panic attack?

24. List four physical signs seen with a panic attack

25. How should a paramedic assist someone who is having a panic attack?

26. What is a phobia?

27. What is a conversion reaction or conversion hysteria?

28. List two causes of delirium that lie outside of the CNS.
-
-
29. Define dementia.
30. Give one example of a disease characterized by dementia:
31. Which is a common symptom of schizophrenia?
- A. Gradual impairment of memory
 - B. Extreme periods of anxiety resulting in emotional stress
 - C. Excessive fear that interferes with functioning
 - D. Sensory perceptions with no basis in reality
32. A person with catatonic schizophrenia
- A. displays grossly disorganized behavior.
 - B. does not readily fit into one of the defined categories.
 - C. is preoccupied with a feeling of persecution.
 - D. exhibits rigidity, immobility, stupor or peculiar movements.
33. A person with paranoid schizophrenia
- A. displays grossly disorganized behavior.
 - B. does not readily fit into one of the defined categories.
 - C. is preoccupied with a feeling of persecution.
 - D. exhibits rigidity, immobility, stupor or peculiar movements.
34. A person with undifferentiated schizophrenia
- A. displays grossly disorganized behavior.
 - B. does not readily fit into one of the defined categories.
 - C. is preoccupied with a feeling of persecution.
 - D. exhibits rigidity, immobility, stupor or peculiar movements.
35. How should a paramedic deal with a patient who is experiencing a misperception of reality?
- A. Go along with his or her delusion to gain their cooperation.
 - B. Try to talk the patient out of their misperception through rationalization.
 - C. Provide a simple and accurate explanation in a neutral tone.
 - D. Reassure them that they are fine and just a little "off" at the moment.
36. In which of these does the individual appear disinterested, often lacking facial expression?
- A. Paramedic students in the last week of class
 - B. Mania phase of bipolar disorder
 - C. Delirium
 - D. Depression
37. A pervasive and sustained emotion that colors a person's perception of the world is
- A. a mood disorder.
 - B. an anxiety disorder.
 - C. schizophrenia.
 - D. a cognitive disorder.

38. List four possible causes of depression

39. Which of these is characteristic of a major depressive disorder?

- A. Lack of any feelings of guilt
- B. Hyperactivity, increased agitation
- C. Recurrent thoughts of death
- D. Impaired ability to deal with reality

40. Which of these is a rapid EMS screening mnemonic for depression?

- A. BAD NEWS
- B. In SAD CAGES
- C. BEREAVE
- D. A DOWN DAY

41. What symptoms can occur with an abrupt discontinuation of Paxil?

42. The term manic refers to

- A. excessive excitement or activity.
- B. profound sadness or feelings of melancholy.
- C. excessive fear that interferes with functioning.
- D. hostility or rage.

43. List four patient characteristics when in a manic state.

44. How should EMS responders manage a manic patient?

45. Which of these characterizes a somatiform disorder?

- A. A state of constant sleepiness or drowsiness.
- B. Physical symptoms that have no apparent physiological cause.
- C. The relatively rapid onset of widespread disorganized thought.
- D. Failure to recall, as opposed to inability to recall.

46. Which is a condition characterized by the patient's failure to control recurrent impulses?
- A. Obsessive-compulsive disorder
 - B. Personality disorder
 - C. Impulse control disorder
 - D. Somatiform disorder
47. Which is true regarding suicide?
- A. Men attempt suicide more than women
 - B. The most common method of suicide is poisoning
 - C. Suicide is the 3rd leading cause of death in the 15-24 year age group
 - D. Suicide rates for younger age groups and the elderly are decreasing
48. A patient with Munchausen syndrome is suffering from a/n _____ disorder.
- A. somatiform
 - B. factitious
 - C. dissociative
 - D. eating
49. A patient with a fugue state is suffering from a/n _____ disorder.
- A. somatiform
 - B. factitious
 - C. dissociative
 - D. eating
50. A patient with bulimia nervosa is suffering from a/n _____ disorder.
- A. somatiform
 - B. factitious
 - C. dissociative
 - D. eating
51. When considering the need to restrain a patient, it is important to remember
- A. patients who are physically restrained must receive frequent and close monitoring.
 - B. to never use "hog-tie" or hobble restraints.
 - C. restrain one arm at the patient's side and the other above the head.
 - D. all of the above.

52. What are extrapyramidal symptoms? How does the patient appear?

53. What drug is indicated to reverse the above symptoms?

54. Identify 3 patients at risk for committing suicide:

55. What is a paramedic's primary responsibility in managing suicidal patients?
56. What paperwork must be completed on a patient with a psychological emergency who has led you believe will imminently harm themselves or others?
57. What type of evidence suggesting imminent danger to patient or other is an EMT able to use in order to sign the above form? (Circle all that apply)
- A. First hand
 - B. Circumstantial
 - C. From a 3rd party who heard the patient's statements on the phone
 - D. From a person on scene who is unwilling to sign the form themselves
58. True or false: EMS personnel are only required to complete the above form if a patient is being transported against their will.
- A. True
 - B. False
59. True or false: EMS personnel are committing a patient to a 24 involuntary admission to a psychiatric unit when they fill out the above form.
- A. True
 - B. False
60. Under which type of consent is an EMT able to treat a patient who presents as a threat to self, others, or is unable to care for themselves?
- A. Implied
 - B. Informed
 - C. Express
 - D. Statutory
61. What portion of the form must be filled out by EMS personnel?
62. List 2 types of patients that require urgent involuntary transport if necessary?
-
-
63. True or false: EMS personnel are subject to civil liability if they act in good faith and without negligence but transport a patient against their will that is later determined to not have a mental illness or an imminent threat to self or others.
- C. True
 - D. False

64. List 3 types of restraints

65. For which civil wrong is a paramedic at risk if they restrain a patient without legal justification?

66. What assessment must be completed prior to applying restraints?

67. According to NWC EMSS Policy, for what purpose may restraints be applied?

68. List 3 patient situations in which restraint application would be appropriate.

69. Is it legal or appropriate to restrain a decisional adult because they are refusing necessary care that could result in harm or death?

- A. Yes
- B. No

70. Which clinical assessments must be done to justify the use of restraints?

71. Which statement should be used to attempt verbal restraint?

- A. "Lay still or we will be forced to tie you down."
- B. "For your safety, I'm going to secure your arms and legs."
- C. "If you don't come with us, we'll have to put you in restraints."
- D. "Don't make me hurt you."

72. At what point should verbal de-escalation cease with a patient experiencing a behavioral emergency?

73. What degree of force can be used when applying physical restraint?

74. Who must authorize the use of restraints? _____

75. At a minimum, how many persons does it take to apply 4 limb restraints? _____

76. List 3 types of hard restraints that are approved for EMS personnel to apply.

77. Are handcuffs an acceptable form of restraint for EMS personnel to apply?
- A. Yes
 - B. No
78. Who is responsible for the safekeeping of all persons in handcuffs?
79. Which is appropriate when restraining an adult?
- A. Restrained patients need frequent and close monitoring.
 - B. Always use "hog-tie" or hobble restraints.
 - C. Restrain both arms above the head and both legs to the base of the stretcher.
 - D. Once sedatives are given to a restrained adult, they can be monitored by EMT-Bs.
80. Which sedative may be given by SOP to calm a patient with a behavioral emergency? (List the drug name, dose, and approved routes)
81. True or false: Once a petition form is signed, EMS personnel may not give medications to a patient who is refusing care unless it is necessary to prevent the patient from causing serious harm to himself or others.
- A. True
 - B. False
82. True or false: Restraints can be removed by EMS personnel enroute if the patient promises to calm down and cooperate.
- A. True
 - B. False
83. What actions can an EMT take to prevent a patient from biting or spitting?
84. What can be placed in a patient's mouth to prevent biting or spitting?
85. What must be monitored after restraint application?
86. List one advantage of the use of a taser.
87. Must barbs penetrate the skin in order for the taser to incapacitate a victim?
88. How does a taser incapacitate a person?
89. Does a taser shock cause a patient to lose consciousness?

90. Do tasers routinely induce dysrhythmias?
91. What are the 3 most common factors associated with death in persons after they were tased?
-
-
-
92. Define: Excited delirium
93. List 2 things that can precipitate excited delirium
-
-
94. What 4 clinical conditions may result from excited delirium and require assessment by EMS personnel?
-
-
-
-
95. Under what circumstances should a 12-lead ECG be done in a person that has been tased?
96. Describe the nature of most taser wounds.
97. List 3 areas on the body from which probes may not be removed.
-
-
-
98. Explain the process for removing a taser probe.
99. What is the preferred patient disposition for those that have been tased?
100. To whom must a death of a person after being tased or sedated be reported?

PSYCHOLOGY NEEDS ASSESSMENT

- On a scale of 0 to 4, how comfortable are you with psychological problems?
0 = not at all, 4 = very comfortable
- Do you feel as if you've had enough training as an EMT-B to effectively treat patients with psychological problems?
0 = not at all, 4 = training was extensive, could handle any case presented
- Do you feel comfortable with the legal issues surrounding psychological calls such as determining if
a patient is decisional or non-decisional, transporting without patient consent, completing a petition
form, legal use of restraints, etc.? ?
0 = not at all, 4 = very comfortable
- What percentage of people has had some form of official psychological diagnosis in their lifetime?
- Rate the following drugs by the severity of overdose, 1 being least severe and 4 being most severe.

Fluoxetine (Prozac), amitriptyline (Elavil), diazepam (Valium), acetaminophen (Tylenol)
- What is the definition of schizophrenia?
- Is substance abuse considered a form of psychological illness?
- Which medications are used to treat psychological illnesses or conditions associated with the treatment of psychological illnesses? Circle all you think apply.

9. What is the difference between hallucinations and delusions?
 - A. Hallucinations are things patients hear, delusions are things they see
 - B. Hallucinations are sensory disturbances, delusions are thought disturbances
 - C. Hallucinations are distortions of real objects, delusions are false perceptions
 - D. There is no difference between the two

10. Hallucinations, tremors, and anxiety are signs and symptoms of
 - A. hypoglycemia.
 - B. alcohol withdrawal.
 - C. bi-polar disease.
 - D. all of the above.

11. Many children are diagnosed with attention deficit disorder and are treated with Ritalin. What kind of drug is Ritalin?
 - A. Sedative
 - B. Stimulant
 - C. Beta blocker
 - D. Anti-psychotic

12. Which are signs or symptoms of depression?
 - A. Inability to concentrate
 - B. Insomnia
 - C. Changes in weight
 - D. All of the above

Common pharmacological agents used in the treatment of mental disorders

Antipsychotics	Antidepressants	Mood stabilizers	Anti-anxiety
<ul style="list-style-type: none"> • Typical (first generation): <i>Chlorpromazine (Thorazine)</i> <i>Haloperidol (Haldol)</i>, <i>Perphenazine (Trilafon)</i> <i>Thioridazine (Mellaril)</i> <i>Thiothixene (Navane)</i> <i>Trifluoperazine (Stelazine)</i> • Atypical (second generation): <i>Aripiprazole (Abilify)</i> <i>Olanzapine (Zyprexa)</i> <i>Quetiapine (Seroquel)</i> <i>Risperidone (Risperdal)</i> <i>Ziprasidone (Geodon)</i> 	<ul style="list-style-type: none"> • Selective serotonin reuptake inhibitors (SSRI): <i>Citalopram (Celexa)</i> <i>Escitalopram (Lexapro)</i> <i>Fluoxetine (Prozac)</i> <i>Sertraline (Zoloft)</i> • Serotonin & norepinephrine reuptake inhibitors (SNRI): <i>Duloxetine (Cymbalta)</i> <i>Venlafaxine (Effexor)</i> <i>Desvenlafaxine (Pristiq)</i> • Alpha adrenergic antagonist, serotonergic: <i>Mirtazapine (Remeron)</i> • Norepinephrine & dopamine reuptake inhibitor (NDRI): <i>Bupropion (Wellbutrin)</i> • Monoamine oxidase (MAO) inhibitors: <i>Isocarboxazid (Marplan)</i> <i>Phenelzine (Nardil)</i> 	<ul style="list-style-type: none"> • Antimanic agents: <i>Lithium carbonate</i> <i>(Carbolith, Lithobid)</i> <i>Carbamazepine (Tegretol)</i> <i>Valproic acid (Valproate)</i> <i>Divalproex sodium</i> <i>(Depakote)</i> <i>Lamotrigine (Lamictal)</i> 	<ul style="list-style-type: none"> • Benzodiazepines: <i>Diazepam (Valium)</i> <i>Nitrazepam (Mogadon)</i> <i>Chlordiazepoxide (Librium)</i> <i>Alprazolam (Xanax)</i> <i>Temazepam (Restoril)</i> <i>Clonazepam (Klonopin)</i> <i>Lorazepam (Ativan)</i> • Imidazopyridines: <i>Zolpidem (Ambien)</i>