Northwest Community EMS System
Paramedic Continuing Education February 2015

Overdoses and BEHAVIORAL EMERGENCIES

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Adapted from NWC EMSS paramedic Curriculum/CJM

Objectives:

Upon completion of the class and any supplemental materials, each participant will independently do the following with a degree of accuracy that meets or exceeds the standards established for their scope of practice:

1. integrate pathophysiological principles and assessment findings to formulate a field impression for a behavioral emergency.
2. determine appropriate actions and precautions necessary when encountering a behavioral emergency.
3. analyze assessment findings that could identify a medical or trauma pathology precipitating a behavioral emergency.
4. integrate psychological emergency SOP review through case study presentation.
5. differentiate legal requirements for pts < and > 18 years of age that are having a behavioral emergency.
6. predict patients that will need completion of a petition form for transport to the hospital.
7. devise techniques for successful treatment of a pt with a behavioral emergency through scenario based learning.
8. conduct techniques for successful assessment for patients with behavioral emergencies.
9. implement a treatment plan for the pt with an intentional overdose that may not want assistance.
10. determine appropriate equipment needed for a pt who is agitated and refusing care.
11. determine the appropriate needs for an adult pt who is agreeable to transport to the hospital but has exhibited dangerous behavior in EMS presence.
12. conclude mental assessment findings that can aid in establishing reliability of a pt with a behavioral emergency.
13. compare and contrast history and exam findings suggestive of a either an accidental or intentional overdose.
14. integrate a treatment plan for a pt with an overdose based on medication hx through scenario based learning.

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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.

Epidemiology

I. 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.

Identify 4 common myths or misconceptions people can have regarding individuals with behavioral problems.

1.
2.
3.
4.

II. 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

http://www.nimh.nih.gov/about/director/2011/mental-illness-defined-as-disruption-in-neural-circuits.shtml

III. **Behavior defined:** A person's observable conduct and activity is known as his or her behavior.

Define and differentiate normal vs. abnormal behavior. _____

_____

_____

_____

IV. **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.

A. May be caused by emotional or physiologic conditions

B. All create undesirable consequences

V. **Broad categories of behavioral disturbances** (psychopathology)

A. **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.

B. **Psychosocial**: Conditions related to a patient's personality style, dynamics or unresolved conflict or crisis management methods

1. Childhood trauma
2. Parental deprivation
3. Dysfunctional family structure

C. **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.

1. Environmental violence
   a. War, riots
   b. Rape, assault
2. Death of a loved one
3. Economic/employment problems
4. Prejudice and discrimination
5. Cultural norms and expectations

VI. **Psychiatric causes** are problems that arise in the mind of the patient. Psychiatric syndromes can be divided into the following categories:

A. **Psychotic disorders** characterized by an impaired view of reality;

B. **Affective disorders** of mood; anxiety disorders involving overwhelming fear; disorientation and disorganization; and

C. Hostile and violent patients.

VII. Why do EMS personnel see behavioral emergencies?

A. Substance abuse may lead to violent behavior
B. Psychotropic drugs & have allowed deinstitutionalization of persons with mental illness
C. Decreased funding for institutional care for chronic psychiatric patients has resulted in closure of inpatient facilities
D. EMS may find bizarre or unusual behavior or statements leading you to believe that they may be in imminent danger of harming themselves
E. Violent acting out
F. Suicidal thoughts and/or suicide attempts
G. Inability to care for themselves in their home environment
H. Need for transport against their will

Psychiatric syndromes are broadly divided between _____ & _____

_____ disorders.

Psychotic disorders are further divided into 2 categories which are:

I. _____ 2. _____

The mnemonic AEIOU TIPS helps the provider to reference those issues of an organic nature that could be the underlying cause for an altered mental status. List the etiology each represents and what treatment if any can be done in the pre-hospital setting.

	Underlying etiology	Pre-hospital Treatment
A		
E		
I		
O		
U		
T		
I		
P		
S		

VIII. **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**

1. Impaired cognition (especially memory)
2. Subtle or major personality change, impaired judgment and abstract thinking.
3. Progresses from word retrieval problems to **aphasia** (inability to communicate).
4. **Apraxia:** Impaired ability to carry out motor activities despite intact sensory function (can't dress or feed themselves, zip a zipper, etc.)
5. **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.

6. **Disturbance in executive functioning**: Impaired ability to plan, organize, or sequence.
7. Occasional frankly psychotic symptoms (non-auditory hallucinations, delusions)
8. Results in profound social impairments
9. Fluctuation of symptoms, worse at sunset (night). Often become very agitated.

C. **Causes**

1. Primary degenerative dementia of the Alzheimer type: most common (60%)
2. **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 B_{12}, folate), endocrine, toxic, substance abuse, and metabolic dysfunction.

IX. **Schizophrenia**

1. **Definition**: A psychotic disorder that may be acute or chronic, often relapsing or remitting, with impaired behavior, mood, thought process, thought content, perception, and judgment, but without clouding of consciousness or cognitive function 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**

Hallmarks

Disturbances of thought & attention
Disturbances of perception
Disturbances of affect
Motor symptoms & withdrawal from reality
Decreased ability to function

A. **Onset:** Appears as early as age 3 although adolescence or early 20s most common (no one gets it after 45)

B. Poor premorbid history - e.g., a long history of **social withdrawal,** eccentricity, and impaired educational/vocational function

C. Family history of schizophrenia often positive

D. Inappropriate affect; laugh or cry at inappropriate times or blunted emotions

E. Disturbed communications

F. **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.

G. **PET scans** show reduced metabolism in frontal lobes of unmedicated patients compared to medicated. Suggestion of ↑ dopamine (D2) receptors in previously unmedicated patients

H. **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

I. **Types or forms**

1. **Disorganized schizophrenia**: The patient displays disorganized behavior, dress or speech
2. **Paranoid schizophrenia:** Patient is preoccupied with feelings of persecution. They often experience persecutory delusions. Paranoia often results from the patient's feelings of self-importance. Some become delusional or hear auditory hallucinations.
3. **Undifferentiated:** Patients do not fit readily into another category

4. **Catatonia**

   a. Co-morbid finding w/ autism

   b. Between 10% and 15% of adult patients with catatonia meet the criteria for schizophrenia

   c. Various infectious, neurologic, medical, and drug-related, and autoimmune conditions have been associated with catatonia

   d. Pt appears awake, but is unresponsive

   e. Assumes and remains in a fixed posture; unable to move or talk (mutism) or stupor of at least 1 hour duration

   f. **Management**

      (1) Rx with benzodiazepine per OLMC
      (2) Prevent harm to self or others
      (3) Treat malnutrition, exhaustion, hyperpyrexia or injury

VII. **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).

VIII. **Severe anxiety** disorder may manifest in a "**panic attack**". It is estimated that 3-10% of the population has 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.

Anxiety and related disorders are most often related to what 4 situations?

IX. **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

X. **Mood disorders**

A. **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.

B. **Depression**

1. Depression is a common disorder that 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.

2. “Major depression 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).

3. 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. Medical diseases may produce symptoms of depression, including anemia and hypothyroidism.

4. 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.

5. When depression becomes prolonged or severe, it is diagnosed as a major depressive episode. 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 a hypothyroidism. It must also not be situational, related to bereavement.

a. Persistent, unrelenting sadness or irritability; feelings of melancholy and helplessness and hopelessness
b. 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
c. Crying easily
d. ↓ appetite and weight loss, or ↑ appetite and weight gain
e. Sleep disturbances; insomnia with very early wakening or hypersomnia
f. Psychomotor retardation or agitation
g. Inability to concentrate or difficulty paying attention or with memory
h. Fatigue, loss of energy, and multiple somatic complaints;
i. Feelings of hopelessness, worthlessness, emptiness, self-reproach, pessimism, or guilt: these may be of delusional proportions but are consistent with depression, not bizarre as in schizophrenia
j. Recurrent **thoughts of suicide** or death - 15% risk
k. No cognitive dysfunction suggesting delirium or dementia (distinguish depressive refusal to answer test questions from actual cognitive impairment)

6. 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.

a. Depression in elderly tends to be chronic, has a low rate of recovery, and is often undertreated
(1) Elderly men have the highest suicide rate
(2) ~10% of adults, up to 8% of teens and 2% of preteens experience some kind of depressive disorder

7. 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).

8. EMS personnel can used the screening mnemonic *In SAD CAGES* for major depression

    a. **In**terest
    b. **S**leep
    c. **A**ppetite
    d. **D**epressed mood
    e. **C**oncentration
    f. **A**ctivity
    g. **G**uilt
    h. **E**nergy
    i. **S**uicide

9. **Management**

    a. Assess for suicidal risk in ALL depressed patients.

    b. 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.

    c. Rule out organic causes, especially in patients over 40.

    d. Most people 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).

        (1) 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.

        (2) There are several types of psychotherapy that have been shown to be effective for depression, including cognitive behavioral

therapy (CBT) and interpersonal therapy (IPT). Research has shown that 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.

(3) 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.

(4) 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).

XI. Major affective disorders

A. Incidence: 1-2% of the population in any given year has a form of this disorder.

B. **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.

1. 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).

2. *The Diagnostic and Statistical Manual of Mental Disorders, 4th Edition* designates several categories of bipolar illness

   a. **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 demonstration hypomania (less extreme and debilitating mania).

   b. **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.

   c. **Cyclothymia**: Alternating episodes of hypomania and less severe depressive symptoms. Frequently missed diagnosis as symptoms are less severe.

   d. **Rapid cycling**: Refers to cases in which four or more episodes (either mania/hypomania or depression) occur in one year (Bohrer, 2001).

3. 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.

4. Rate of suicide in bipolar I disorder is 10-15%. Close to half have a substance abuse problem.

5. **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.

   a. **Characteristics of manic episodes**

      (1) Awake & alert, but easily distracted with ↓ concentration

(2) Activity (social, work or sexual) is markedly increased Physically restless, ↑ motor activity, decreased need for sleep

b. Euphoric or dysphoric (extreme emotional discomfort) mood (Can be treated with anti-anxiety meds like benzodiazepines)

(1) Speech is rapid, flight of ideas, racing thoughts

(2) Thoughts: inflated self-esteem, to point of grandiose delusions

(3) Memory may be distorted by delusions

(4) Orientation to time and place is commonly disturbed

(5) Perception may be disturbed by hallucinations (sensory experiences)

(6) Self-destructive activities - e.g., spending sprees, hyper-sexuality, foolish investments or projects, reckless driving, all inconsistent with previous behavior

(7) With severe impairment, bizarre delusions, hallucinations, and incoherence

c. **Management**

(1) Consider the possibility of drug abuse, especially if this is a first "manic" episode.

(2) 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".

(3) Keep sensory stimulation to a minimum

(4) Sit at eye level and talk matter-of-factly. Avoid discussion of delusional symptoms.

(5) *Pearl:* Manic patients can be humorous, whereas schizophrenic pts generally cannot.

6. 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.

XII. **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 has been reported.

a. **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:

a. #1 amitriptyline (Elavil)
b. #2 acetaminophen (Tylenol)
c. #3 diazepam (Valium)
d. #4 fluoxetine (Prozac)

G. **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 amnestic 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.

XIII. 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: When determining if there is imminent danger, what questions should be asked of the individual?**

   a. _____?
   b. _____?
   c. _____?
   d. _____?

e. _____?

f. _____?

g. _____?

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.

What role can EMS play in the life of the patient who is contemplating suicide in which to make a significant difference?

_____

_____

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.

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.

XIV. Interviewing techniques/principles

A. **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.

B. **Respect the patient's personal space**. Do not touch the patient without first telling him or her what you are about to do.

C. 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.

D. **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.

E. Avoid speaking with family members or bystanders in hushed or secretive tones.

1. Sit down, if possible, at a 45° angle to patient avoiding the "shadow zone"
2. Be prepared to spend time with a disturbed patient.
3. **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.
4. **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.
5. 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."
6. 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.
7. 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.
8. **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.
9. **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.

10. **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.

11. Acknowledge and label the patient's feelings. Identifying feelings and giving them a name (fear, anger) helps the patient gain control over them.

12. **Don't argue**. If the patient 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.

13. **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.

14. **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.

15. 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.

16. **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.

17. Bring all the patient's medications with him or her to the hospital.

18. 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.

19. 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.

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.

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.

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

Thorough assessment:

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 seen 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.	**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.

	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.
Affect and Mood	**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.
	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.
Memory	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.
	Registration - Ability to add new information.
	Retention - Ability to store information in an accessible place in the mind.
	Recall - Ability to retrieve a specific piece of information.
	Recognition - Ability to identify information.
	Confabulation - Explanations used to fill gaps in memory.
	Amnesia - Loss of memory.
Orientation	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.
Perception	**Illusion** - False interpretations of actual perceptions - e.g., belief that a passing cloud represents a radioactive vapor or mistaking rope for snake.
	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.

Current discussion on the use of naloxone for police agencies as well as the lay public from around the system and beyond.

Emergency naloxone for heroin overdose

Should it be available over the counter?

Naloxone saves lives. Timely injection of the opiate antagonist naloxone rapidly reverses the respiratory suppression of heroin overdose,[1 2] a major cause of death in young people.[3 4] Recent regulatory amendments increase significantly the extent to which naloxone can now be used to prevent opiate overdose deaths. In June 2005, in the Medicines for Human Use (Prescribing) (Miscellaneous Amendments) Order,[5] the United Kingdom added naloxone to the limited list of medicines that may be given by injection "by anyone for the purpose of saving life in an emergency" (alongside emergency adrenaline, glucagons, and snake antivenin). An emergency dose of naloxone may now be given to prevent death from heroin overdose without specific medical instruction. In August 2005, New York state passed legislation (bills A.7162-A (Dinowitz) and S.4869-A (Hannon)) establishing that physicians may lawfully prescribe naloxone explicitly for potential future opiate overdose, including the situation where it may be administered to someone else.

Many people who take overdoses of heroin die even though friends or family are present.[6] Peers often attempt to resuscitate,[7] sometimes incorrectly,[w1] and death may occur from respiratory arrest before

P+ *Summary of good practice with take-home naloxone and extra references w1-w7 are on bmj.com*

emergency services arrive. People who overdose, and their friends and family, could be given supplies of naloxone to keep at home and could be trained to give lifesaving interim care.[1 2] Naloxone is already approved for reversing opiate overdoses. About 10% of user distributed naloxone is used for resuscitation—an informal project in Chicago reports 440 "reversals" from 6000 doses distributed (D Bigg, personal communication, 2006), and no fatalities or adverse reactions have yet been reported. The novelty is in the different settings and people giving naxolone.

Doctors are the primary group able to prescribe and administer naloxone. But many people who take overdoses die before the doctor arrives. Naloxone is already approved for use by ambulance services, similar to giving thrombolysis and defibrillation for suspected myocardial infarction. Some nurses and pharmacists can now give naloxone, under new "patient group directions" in the UK.[3 4] Doctors can instruct patients in self administration, as well as instructing family or other carers in emergency care or drug rehabilitation houses. Naloxone can be prescribed to named patients for self administration (this is an orthodox doctor-patient relationship, analogous to prescribing antivenin or emergency adrenaline). However, most opiate misusers are incapacitated by the time they realise they are overdosing. Named patients, with named carer, relative, or friend trained in its administration, can be prescribed naloxone (as with emergency adrenaline for anaphylaxis or glucagon for hypoglycaemia). Prescription to named patients, who themselves train another in assessing overdose and giving naloxone, is also possible, making naloxone more widely available but less controllable for clinicians. All these approaches are already being used within different clinical services in different localities.

Within our own clinical services, we currently target two groups, both with a high incidence of overdose: detoxified opiate misusers being discharged back into the community,[5 6] and patients in the first few weeks of methadone substitution therapy.[5 6] We also plan to provide naloxone to former opiate misusers being released from prisons, in view of their recognised excess mortality.[7]

Three proposals should be considered to increase the availability of naloxone. Firstly, further training should be provided in emergency administration of naloxone by non-healthcare staff. Non-healthcare staff in police stations, prisons, rehabilitation hostels, or remote communities could be trained in recognising and managing overdoses (as aircrew are trained in managing in-flight emergencies) and could even receive instruction by mobile phone.

Secondly, patients or carers could administer naloxone to others who have a heroin overdose. If a patient or carer, trained in use of naloxone, is called to a life threatening heroin overdose, then they could potentially save a life by administering naloxone while waiting for emergency services to arrive. Although we do not currently recommend this, as it is unclear where the boundaries of duty of care lie, we are hearing from trained patients, carers, and staff who have given naloxone to others and judged it to have been life saving.

Thirdly, in the future, perhaps naloxone should be available over the counter in pharmacies, needle exchange programmes, and voluntary agencies to reach those at risk who are not in treatment. This would make it more available but would require further legislation, and the public would need training.

Naloxone is an extraordinarily effective drug and has been "transferred" to ambulance crews. The next logical transfer is for take-home naloxone to be given to patients at risk, their families, and carers (see bmj.com) to prevent deaths in the critical minutes before specialist care arrives.

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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

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

_____

_____

_____

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

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

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_____

_____

_____

List four patient characteristics when in a manic state.

_____

_____

_____

_____

How should EMS responders manage a manic patient?

_____

_____

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_____

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

Identify 3 patients at risk for committing suicide:

_____

_____

_____

_____

What is a paramedic's primary responsibility in managing suicidal patients?

What paperwork must be completed on a patient with a psychological emergency who has led you believe will imminently harm themselves or others?

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

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

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

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

What portion of the form must be filled out by EMS personnel?

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.

A. True
B. False

What drug is being used thorughout the nation by police personnel for the use in drug overdoses for opioids? _____