6277.04 BEHAVIOURAL EMERGENCIES

INTRODUCTION

Mental illness reflects conditions that disrupt a person's thinking, feelings, mood, ability to relate to others, and daily functioning. Absolutely anyone at any age can be affected, and many are treated with medication, therapy and other mental health services.

Unfortunately there is a social stigma attached to mental illness that often deters patients and families from accessing appropriate health care in a timely fashion, thus by the time EMS is activated, the patient's health concerns may have escalated to a crisis or emergency status.

Exacerbation of mental illness is often secondary to acute/chronic social stressors (e.g. life changes, relationship difficulties, financial hardship), non-compliance with treatment, and/or substance abuse.

It is also important to keep in mind that some physical illnesses or toxicological emergencies can present with an altered mental status or changes in behavior. Do not dismiss these possibilities right away when caring for a patient with a mental illness who appears to be having a mental health emergency.

SAFETY

Clinicians should assess for any potential of personal risk when approaching patients who are upset, distressed, disoriented, agitated, or threatening. Consider the utilization of additional resources; the de-escalation of crisis situations may require the involvement of family, caregivers, or police.

Consider the fact that these patients may have weapons in their possession in an attempt to harm themselves or others. Contact law enforcement if required.

For violent patients who are spitting, a surgical mask may be placed over their mouth.

ASSESSMENT

When assessing a patient with a mental illness, always keep in mind the potential for the cause to be of an organic nature (e.g. hypoxia, hypoglycemia, intoxication, stroke, Addison's disease, or head trauma). A history and physical exam can help to exclude some of these conditions. See the Altered Level of Consciousness CPG for more information. Once the primary assessment is completed and no immediate life-threatening conditions are noted, further assessment can be done to gather more information regarding the mental state of the patient.

Being confronted by a patient with a mental health emergency can be stressful and time consuming, and often requires a modified approach from that of the routine patient. For example: [1] patients experiencing extreme anxiety may have difficulty staying still, [2] patients with intense fear may not respond to a rational approach to assessment and treatment, [3] patients with disruption in thought processes may become agitated when their thinking is challenged. There are numerous other examples of how the traditional approach to patient assessment may need to be adapted.

There are hundreds of defined mental illnesses, and numerous classifications in which many fit. Some of the more common mental illnesses clinicians will be faced with include:

Mood and Anxiety Disorders

These disorders are very common. They represent extremes of emotion (e.g. depression, panic, phobias). There may be considerable distress but the patient often has insight into their condition.

Psychosis

A group of disorders in which the patient is severely distressed and may not appear to be rational. They may have strongly-held beliefs that are unusual or are not substantiated by actual events (i.e. delusions). They may perceive voices that are not heard by others. By definition, psychosis refers to a break from reality.

Mania

These patients are often overactive and have not slept well in days. They tend to be obsessional and persistent in their behaviour. They have rapid thought processes, pressured speech, and tend to dominate a conversation. They often suffer from delusions of grandeur.

Schizophrenia

Schizophrenia is one of the common causes of psychosis. It may present acutely with severe change in behaviour or a slow progressive change over time; the patient may have delusions or auditory hallucinations.

Paranoia

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Paranoia can be a feature of other conditions such as depression or schizophrenia. Paranoid patients often suffer delusions of persecution (i.e. believing a person or group is out to harm them). They can be extremely suspicious and can react unpredictably (can be aggressive or violent). Provide reassurance and avoid provocation.

Cognitive Disorders

These disorders can have an organic cause, or can be a result of physical or chemical injury. It can manifest as dementia or delirium. It is important to note that dementia and delirium are very different conditions caused by different etiologies. Dementia is a chronic, slow-progressing disorder whereas delirium is acute with rapid onset.

A mental illness assessment can be approached as a six-step process. This takes very little time and can provide a great deal of pertinent information.

1. Appearance and Behaviour
   - Are they dressed appropriately?
   - What is their motor activity: Are they pacing? Do they have tremors?
   - What is their response to responders?
   - Is the behaviour appropriate for the situation?
   - What is their level of grooming and hygiene?
   - What is their posture and facial expressions like?
   - Do they have extra ocular movements?
   - Do they make (and/or keep) eye contact?
   - What is their skin temp, colour, moisture?

2. Speech
   - Rate: Is it fast or slow?
   - Tone: Monotone, stuttering, singing, etc.?
   - Volume: Overly loud or quiet?
   - Quality: Clear, stammering or slurring?
   - Quantity: Spontaneous or hesitant?

3. Thought Content and Flow
   - Do their thoughts follow a logical progression?
   - Do they have delusions (paranoid or false beliefs)?
   - Do they have ideations (persistent unwanted thoughts)?
   - Do they have phobias (unwarranted fears)?
   - Are they preoccupied with something?

4. Mood/Affect
   - Can the patient rate their mood on a scale of 1 to 10?
   - Is the patient's mood appropriate for the situation?
   - Does the patient have mood swings or behaviours that indicate anxiety, depression, anger, or hostility?

   Mood is a subjective report on how the patient feels and *affect* is an objective finding regarding how the patient appears

5. Perceptions
   - Do they have illusions (false perceptions)?
   - Do they have hallucinations (seeing, smelling, hearing, or tasting something that is not actually there)?
   - Do they demonstrate kinesthetic blending (misinterpretation of the sense such as "I see music")?

6. Cognitive Ability
   - What is their level of consciousness?
   - How is their memory?
   - What is their attention span?
   - What is their general intellectual functioning?
   - Do they demonstrate insight and/or good judgement?

Determining the history of the complaint also includes information regarding previous mental health services used as well as the use of prescription medication, alcohol and/or other substances. Collateral history from family, friends or co-workers is often beneficial during the assessment of the patient with a mental health emergency. If these friends/family do not travel with the patient to the hospital, the information gathered on the scene may be the only information available to hospital staff regarding the patient's normal state.

Delirium vs Dementia

Delirium is an abrupt disorientation of time and place and is caused by an underlying disorder. Without a detailed history from a collateral source (e.g. family), it is often difficult to differentiate between delirium and dementia as both present with disorientation as well as impaired memory and thinking. The Confusion Assessment Method (CAM) was developed for the ICU in order to help determine if a patient was positive for delirium. The assessment is as follows:

1. Is there an acute change or fluctuating course (over past 24 hours) of mental status?

- If no, there is no delirium
- If yes, check inattention

2. Is the patient inattentive? Ask the patient to squeeze your hand whenever you say the letter A then say the following letters: SAVEAHAART
    - If the patient makes more than 2 errors (i.e. does not squeeze your hand when you say A, or squeezes your hand when a letter other than A has been said), check level of consciousness
    - If the patient makes 2 or fewer errors, there is no delirium
    - If the patient is making errors, ensure the inattention is not due to a hearing, sight or language issue
3. Does the patient have an altered level of consciousness?
    - If they are anything other than alert and calm, delirium is present
    - If they are alert and calm, check thinking
4. Disorganized thinking: Is the patient illogical? Rambling? Incoherent? Ask simple logic questions such as:
    - Will a stone float on water?
    - Are there fish in the sea?
    - Does one pound weigh more than two?
    - Can you use a hammer to pound a nail?

    If they make more than 1 error, delirium is present

If a patient is suspected of having delirium, the receiving facility staff should be notified as soon as possible. Management of delirium is aimed at treating the underlying cause.

Violent-Agitated Patients

A very small number of patients with mental health emergencies are potentially violent however, the clinician should regularly assess for potential violence:

- Does the patient have a past history of hostile, aggressive, or violent behaviour?
- Is the patient's stance and posture indicative of hostility or violence?
- Does the patient's speech pattern indicate possible aggression? (e.g. loud, obscene language, and/or erratic speech)
- Is the patient pacing, agitated, and/or protective of their physical boundaries?

If the signs of possible violence are present, the clinician should avoid confrontation and attempt to reduce any stressors. If there is a threat to personal safety, the clinician should retreat from the area and wait for law enforcement.

It is important to remember when responding to calls involving individuals with mental health emergencies that the patient's family and friends are often excellent sources of information regarding the patient's normal state. They are also likely to be aware of any treatment, behaviour or communication limitations.

MANAGEMENT

The overall goal of management is to establish trust and rapport with the patient and provide emotional support while also assessing for and managing co-existing emergent medical problems. Management of most patients will focus on non-pharmacological interventions. It will require effective communication skills and empathy, and utilization of additional resources as required. These patients possibly require transport for further assessment. The clinician should provide constant monitoring of the patient. In any mental health crisis, it is important to recognize that what the patient is feeling is real to them, and should not be ignored.

Management of patients with a mental health emergency should also include a risk assessment to determine if the patient is a potential threat to themselves or others, this mandates transport to hospital. If the patient is suicidal or has a plan to harm themselves and/or the plan is intended to be successful and/or they have a means or method to follow through with the plan, they are at high risk for suicide. If they refuse transport, law enforcement should be contacted.

Under the Mental Health Act, if someone with a psychiatric complaint is a danger to him/herself or others, or is likely to deteriorate to the point that they are in danger they can be involuntarily taken by law enforcement and be held for up to 24 hours for a mental health assessment.

Capacity

Capacity is a clinical determination at the time of patient encounter whereas *competence* is a legal standard that is determined by the judicial system.

The patient must understand the information regarding the treatment options specific to their condition and appreciate the foreseeable

consequences of their decision. Patients who present as a danger to themselves or others, are significantly disabled due to illness or injury, or are intoxicated due to alcohol or drugs are examples of people who may not have the capacity to refuse treatment/transport. If the patient is refusing treatment/transport and their capacity is in question, contact OLMC.

If the clinical presentation is such that the patient is at high-risk and capacity to refuse transport is not clearly demonstrated, the assistance of law enforcement may be required in order to transport the patient involuntarily. OLMC should be involved in all cases where there is a question of capacity.

Violent-Agitated Patients

If a patient has lost the capacity for medical decision making and their behaviour does not allow for a thorough evaluation and/or emergent treatment, patient restraint may be required. There are three methods of restraint:

1) Verbal de-escalation
2) Physical restraint
3) Chemical restraint

Verbal De-escalation

In the case of an agitated or violent patient, always attempt verbal de-escalation of the situation first; approach the patient in a calm manner and present a professional, positive, concerned image. Avoid direct eye-contact or encroachment into the patient's personal space.

In the event that physical/chemical restraining is required, extreme caution must be used to avoid potential harm to both the patient and others involved. Contact law enforcement for assistance in these cases.

Physical Restraint

If violent behaviour must be controlled, 'reasonable force' can be used. The patient's dignity should be respected and the restraint techniques humane. Physical restraint should use the least restrictive method possible that protects the patient and EMS personnel from harm. Restraint should be left to law enforcement whenever possible. If restraint is deemed to be necessary, the clinician (and law enforcement) should attempt to gain the patient's cooperation and also maintain a safe environment. Physical restraint is not a one-person task, and will often require a full team of personnel (often a minimum of 5 people) in order to ensure the safety of everyone involved.

The restraints being used should be explained to the patient before any force is used. Preferably, commercially available restraint systems can be used, but cravats, small towels, blankets, and spineboard straps can all be used as effective restraints. Whatever is used must be strong enough to withstand the force while also avoiding circulatory or respiratory compromise. If handcuffs are applied by law enforcement, an officer must accompany the patient in the back of the ambulance. Patients who have been tasered must also be accompanied by police to the ED.

Patients who are restrained must never be transported prone or in a hog-tied position, and their ventilations must be closely monitored. The neurovascular status of all restrained extremities should be frequently checked. It is important to ensure that restraint techniques do not constrict the neck or compromise the airway.

Patients may continue to struggle after physical restraint. This can lead to hyperkalemia, rhabdomyolysis and cardiac arrest. To prevent forceful struggling, chemical restraint may be required.

Chemical Restraint

Typically, physical restraint is obtained first in order to facilitate a safer environment in which to provide chemical restraint.

Benzodiazepines can be used to provide sedation to violent-agitated patients (**PEP 1 supportive**). If a patient is given a medication for sedation, they must be transported to the hospital by paramedics (i.e. not in the back of a police car).

Autonomic Hyperarousal State (AHS)

AHS, also known as excited delirium, is a term used to describe a group of symptoms that may be caused by a broad range of conditions and may be multi-factorial. The symptoms indicative of AHS include: [1] extreme agitation and restlessness, [2] aggressive/combative behaviour, [3] paranoia or delirium, [4] incoherent or rambling speech, [5] extraordinary strength, [6] numbness to pain, and [7] profuse sweating. Other common findings include tachypnea, police non-compliance, stimulant use, lack of tiring, and inappropriate clothing for the environment. Death can occur suddenly, and typically follows physical control measures.

The difficulty in clinically identifying AHS is that the spectrum of behaviours can be found with many

disease processes. It is the combination of delirium, psychomotor agitation, physiological excitation, and autonomic dysregulation which differentiate AHS from other processes that cause delirium only.

If AHS is suspected, contact law enforcement and OLMC early. It is up to law enforcement personnel to control these patients but the clinician must recognize this as a medical emergency and assume responsibility for assessment and clinical management of the patient. OLMC can help co-navigate the approach to the patient as these are high risk patients.

Treatment is often supportive and aims to reduce the agitation, hyperthermia, and acidosis, all major components of AHS. Benzodiazepines for sedation should be given as a first-line treatment. Volume resuscitation and passive cooling can be considered. The patient should be actively monitored and continuously reassessed.

Other Available Resources

Mental Health Crisis Line: This is a provincial line within the province of Nova Scotia to provide 24/7 support in mental health crises. The number is 1-888-429-8167.

Mental Health Mobile Crisis Team: This is a crisis support service of Capital Health, IWK Health Centre, Halifax Regional Police and Nova Scotia Department of Health. The team provides support for people in most communities of Halifax Regional Municipality with any mental health crisis. This team can be reached at the Mental Health Crisis Line as indicated above.

Adult Protection Services: Under the *Adult Protection Act*, this service provides help and support for anyone 16 years of age or older who are abused (excluding financial abuse) or neglected and cannot physically or mentally care for themselves. If a patient has the capacity to look after themselves, or have solely poor hygiene or housekeeping, the *Adult Protection Act* does not apply. If a clinician notes that an adult is in need of protection for the above reasons, they must call 1-800-225-7225.

TRANSFER OF CARE

Early notification of staff at the receiving facility should be considered if additional resources are anticipated upon arrival at the ED. Verbal and written reports should include pertinent history, medications, precipitating factors, risk of self-harm or harm to others, suicide risk, any treatment provided, and if any type of restraints were required.

CHARTING

In addition to the mandatory fields it is important to document the following in the ePCR text fields:

- Precipitating events leading to crisis
- Documentation of capacity evaluation
- Caregivers, family, and healthcare providers present
- Suspected or known substances abused
- Any restraints used
- Any treatments provided

If a patient is restrained, documentation must include:

- Patient assessment
- Reason for restraint
- Restraint procedure
- Frequency of reassessment
- Care during transport

KNOWLEDGE GAPS

There is a relative paucity of published literature on the pre-hospital approach to the patient with behavioural emergencies. In particular, the use of physical restraints has very little published literature.

EDUCATION

There is a global stigma attached to mental health. Clinicians are encouraged to maintain CME through conferences, education days and other integrated health care sessions.

QUALITY IMPROVEMENT

Calls involving physical or chemical restraint, tasers, non-transports, AHS, and any injury to patient or personnel will be reviewed in a prospective CQI program.

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White Paper Report on Excited Delirium Syndrome, ACEP Excited Delirium Taskforce, Sept 10, 2009

Kupas DF, Wydro GC. (2002) *Patient Restraint in Emergency Medical Services Systems.* Position Paper, National Association of EMS Physicians.

https://emspep.cdha.nshealth.ca/

PEP 3x3 TABLES for Mental Health Emergencies

Throughout the EHS Guidelines, you will see notations after clinical interventions (e.g.: **PEP 2 neutral**). PEP stands for: the Canadian **P**rehospital **E**vidence-based **P**rotocols Project.

The number indicates the Strength of cumulative evidence for the intervention:
1 = strong evidence exists, usually from randomized controlled trials;
2 = fair evidence exists, usually from non-randomized studies with a comparison group; and
3 = weak evidence exists, usually from studies without a comparison group, or from simulation or animal studies.

The coloured word indicates the direction of the evidence for the intervention:
Green = the evidence is supportive for the use of the intervention;
Yellow = the evidence is neutral;
Red = the evidence opposes use of the intervention;
White = there is no evidence available for the intervention, or located evidence is currently under review.

PEP Recommendations for Mental Health Emergency Interventions, as of 2013/05/14. PEP is continuously updated. See: http://emergency.medicine.dal.ca/ehsprotocols/protocols/toc.cfm for latest recommendations, and for individual appraised articles.

Depressed Suicidal

Recommendation		RECOMMENDATION FOR INTERVENTION			
		SUPPORTIVE (Green)	NEUTRAL (Yellow)	AGAINST (Red)	NOT YET GRADED (White)
STRENGTH OF RECOMMENDATION FOR INTERVENTION	1 (strong evidence exists)				• Reassure
	2 (fair evidence exists)				
	3 (weak evidence exists)				

Violent-Agitated

Recommendation		RECOMMENDATION FOR INTERVENTION			
		SUPPORTIVE (Green)	NEUTRAL (Yellow)	AGAINST (Red)	NOT YET GRADED (White)
STRENGTH OF RECOMMENDATION FOR INTERVENTION	1 (strong evidence exists)	• Antipsychotics (Atypical) • Antipsychotics (Typical) • Benzodiazepines			
	2 (fair evidence exists)				
	3 (weak evidence exists)			• Field Restraint Devices	

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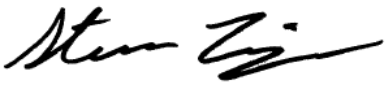
Signature of Program Director 	Signature of Program Document Coordinator 	

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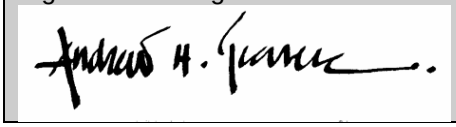
Signature of Program Director 	Signature of program Document Coordinator