

Chapter 13

Psychiatric emergencies

Locatelli M.^a, Manfredi E.^b, Fregna L.^{a,*}, Martini F.^{a,*}, Pratesi D.^b, Perrozzi G.^b, Colombo C.^{a,b}

^a: IRCCS San Raffaele Scientific Institute, Milan

^b: Vita-Salute San Raffaele University, Milan

*Corresponding Authors:

fregna.lorenzo@hsr.it

francesca.martini1@hsr.it

Other Authors: locatelli.marco@hsr.it, manfredi.elena@hsr.it, pratesi.donata@hsr.it, perrozzi.giulia@hsr.it, colombo.cristina@hsr.it

Abstract

Psychiatric emergencies are conditions of acute disturbance of thought, behaviour, affect or psychomotor activity, demanding urgent interventions. They mostly include attempted suicide, severe depression, psychosis, substance abuse, violence or other rapid changes in behaviour. The initial assessment should include a thorough history collection and a general physical examination with a lab screening, to rule out any underlying medical cause, as well as providing a secure environment for both the patient and healthcare workers.

Keywords: Psychiatric emergencies; Psychosis; agitation; Suicide; Withdrawal; Anxiety

13.1. Introduction

A psychiatric emergency is an acute onset of severe psychopathological symptoms, such as thought, affect and motor disturbances, requiring rapid diagnostic and therapeutic interventions in order to minimize risks for the patient, and bystanders too.

Up to 50% of patients presenting with a psychiatric emergencies have a coexisting medical disease. Thus, medical screening with physical examination, neurological examination and laboratory tests is mandatory in order to identify any physical conditions, which would be the cause or a precipitating factor to the psychiatric emergency itself.

About 6% to 25% of all emergency department (ED) access are due psychiatric emergencies, with or without concomitant physical conditions.

13.2. Assessment

Psychiatric and medical history

The clinical interview with complete clinical history collection is fundamental and it could be integrated indirectly by interviewing also the caregivers or bystanders present at the onset of the current acute symptoms. In the ED, a specific requirement for the psychiatric consultant is to gather information thoroughly and concisely. The main aims of emergency evaluation of a psychiatric patient would be assessing the need of hospitalization and relieving the acute distress. In a second moment, when the emergency is passed, there will be time to investigate furtherly in the ward or in the outpatient clinic setting.

Physical Examination

Priority is to ensure stabilization of vital signs (airways, breathing and circulation). A complete physical examination, including neurologic examination, should be performed on all patients.

Physical symptoms may indicate an organic cause, including infections, endocrine abnormalities, autoimmune dysfunction, central nervous system disease, substance intoxications or withdrawals. Prompt assessment and correction of physical disorders generally relieves psychiatric symptoms. Here we describe a few and frequent examples:

- Hypoxia and hypotension can manifest with agitation, disorientation, numbness
- Hypertension or hypertensive crisis can present with psychomotor agitation or anxiety
- Tachycardia can be associated with agitation or acute anxiety, but also could be a symptom of an underlying medical disorder like infectious state with fever, intoxication, withdrawal, cardiac disease

The neurologic examination should involve a general assessment of orientation (in space, time, and autobiographical clues), memory, cranial nerves, language, motor system and reflexes, cerebellar function. If any focal neurologic deficit emerges, the patient must undergo further tests to examine acute neurologic causes of their presentation (for example stroke, encephalitis/meningitis, nerve palsy, faints, peripheral motor disorders, neurodegenerative disorders...).

Eventually, atypical features of psychiatric illness (for example visual hallucinations) should suggest an organic disorder aside from a primary psychiatric illness.

Red flags for a probable organic origin of the acute psychiatric condition:

- Acute onset
- First episode
- Elderly
- Physical comorbidities
- Substance abuse
- Non-auditory hallucinations
- Neurological signs
- Disorientation, loss of memory, difficulty concentrating, apraxia

Routine Laboratory Testing

In order to exclude medical conditions, it is helpful during the evaluation of a patient with a psychiatric emergency to perform lab tests that include full blood count, metabolic panel, toxicology screening, thyroid panel, liver and kidney function tests, glucose tests and C-reactive protein.

Neuroimaging

Whenever a patient with acute psychiatric complaints shows also neurologic symptoms, and/or has a positive history for head trauma, it is recommended to perform a brain imaging to rule out neurological acute disorders. The fastest imaging technique is computed tomography (CT scan), but several hospital also perform magnetic resonance imaging (MRI) in acute settings.

Additional Testing

Additional testing in the ED should include EKG in patients with heart concerns (for example arrhythmia or ischemia). A spinal puncture, to rule out meningitis or encephalitis, if the patients present with neurological focal signs and fever, leucocytosis, delirium, or altered consciousness. An EEG should be requested for patients with personal history positive for seizure disorder.

13.3. Classification of emergencies

Conditions requiring a specialistic psychiatric evaluation usually are alternations in mood, though and behaviour. Such disturbances from normal functioning (referred to a person's previous state or regarding the general population "normal" activity) can take place alone or with a various degree of physical illness. There are in fact many medical disorders and diseases that are accompanied by anxiety, psychomotor agitation, low mood, hallucination... For example, an acute anxiety crisis can represent a pure anxiety disorder, but also a heart attack patient is likely to feel anxious; low mood

can be a pivotal symptom in depressive disorders, or it can be a collateral feature of endocrine disorders or neurological diseases.

Conversely, psychological disorders can manifest with a preeminent physical complaint, and only later in time the patient will “get in touch” with their mood and thoughts. For example, syncope can be a manifestation of a pure cardiologic or neurologic disorder, or it can be a conversive disorder symptom. Low appetite can be due to cancer, or to depressive disorder. Lastly, there are substance intoxication and withdrawal which manifest with life-threatening alterations in consciousness and vital signs, being a medical emergency, but substance abuse disorders are a big issue in psychiatric care settings.

13.3.1. Anxiety Disorders

Among anxiety disorders, Panic Disorder is the most frequently encountered in emergency care settings, requiring a prompt and clear differential diagnosis with other serious physical pathologies.

Assessment

The patient refers to the emergency department worried that the symptoms presented (palpitations, pain in the chest or arm) indicate a serious disease, statically a heart attack or a stroke are the mostly reported. When a panic attack comes, a vicious circle is created in which anxiety causes hyperventilation that produces alarming somatic symptoms, which in turn sustain the fear of tremendous physical illnesses, making the subject overwhelmed and worsening hyperventilation, and so on.

Having ruled out any physical condition, panic attack is a diagnosis of exclusion.

An attack lasts generally 10 to 30 minutes, so the healthcare professional is often confronted with “post panic attack anxiety” characterized by a state of serious concern and profound asthenia. An acute anxiety crisis can be quite similar to a panic attack, but it usually lasts longer and symptoms mitigate more softly. In both cases, if post-acute mental and physical distress are particularly high, pharmacological intervention can be offered.

Later, it is extremely important not to dismiss the patient's symptoms but calmly explain the patient the psychogenic origin of the distress and to provide them with information regarding panic and anxiety disorders, potential treatment and prognosis (highlighting that is highly favourable in most cases) and addressing them to speciality setting.

Differential diagnosis

- Myocardial infarction

- Pulmonary embolism
- Acute surgical disease
- Hyperthyroidism
- Pheochromocytoma
- Hypoglycaemia
- Diabetic ketoacidosis
- Cushing's syndrome
- Hypocalcaemia
- Encephalopathies
- Asthmatic disorders

Management and treatment

Immediate treatment for a panic attack relies on short-peak and half-life benzodiazepines (e.g. alprazolam) by mouth (both drops and tablets are available). If post-acute anxiety is particularly high, immediate pharmacological intervention mid-long half-life benzodiazepines (e.g. delorazepam) may be necessary, by mouth or in some cases it is preferable to administer them parenterally which is more effective.

13.3.2. Mood Disorders

DEPRESSION

Depressed patients can present to the emergency department or be referred by the GP or a relative in diverse acute situations: suicidal thoughts or attempts, delusionary thoughts or disorganized behaviour, alarming changes in nutritional status up to cachexia. Usually, these are specifiers of severity of the depressive episode and hospitalization is required.

Assessment

The presence of thoughts about death is quite common in depressed patients: it is fundamental to assess suicidal ideation during the clinical interview, to investigate the issue with the patient, and evaluate the presence of other risk factors, in order to establish the best preventive strategy.

Delusions and hallucinations in depressive episodes are usually mood-congruent, but they can be incongruent and associated with dysphoric and irritable mood, which make the patient at greater risk of impulsive and potentially self-damaging behaviour. Disorganized behaviour in depressed patients

can be another psychotic-spectrum symptom or a manifestation of pseudodementia, together with confusion, difficulties in memory and disorientation.

Another pivotal area that is affected is neurovegetative system, so that a depressed patient typically loses appetite and the sense of thirst. Another case is that they starve due to lack of driving force to cook and eat at minimum suffice or due to delusions or hallucinations. Depression frequently is accompanied by drastic weight loss and dehydration: fluid and electrolyte imbalances can figure a medical emergency, especially in elderly patients or in those with physical comorbidities. In all these cases, a complete lab testing is helpful to assess the severity of physical compromise and necessity of supplementation.

Management and treatment

As stated above, depressive episode emergencies typically require hospitalization to address the acute distress, monitor and optimize the pharmacotherapy and evaluate further medical interventions as needed.

In case of suicidal ideation, pharmacological interventions include lithium salts as first choice, or other anti-impulsive agents if impulse dyscontrol is extended to many areas, such as substances or behaviours, and lithium is contraindicated: the most frequently administered are valproate, aripiprazole, carbamazepine.

Treatment of psychotic features requires antipsychotic agents, being the fastest and more effective haloperidol, but it easily causes extrapyramidal adverse effects. For this reason, second generation antipsychotics are usually preferred.

MANIA

Manic patients are often agitated and not cooperative as they frequently have poor insight.

Assessment

Typical symptoms are elated mood with or without irritability, racing thoughts and speech, insomnia, hyperactivity and higher risk of aggressive behaviour; psychotic symptoms such as delusions of grandeur or persecution can also be present.

Differential diagnosis

Clinical cases resembling a manic state can be mainly due to must be stimulants intoxication, alcohol withdrawal, steroids induced-mania, neuro-degenerative disorders. It is fundamental to review the

psychiatric and general medical history of the patient, to evaluate the presence of previous mood episodes, the consumption of drugs and substances, the presence of other medical comorbidities.

Management and treatment

Managing mania can be challenging, because of the lack of insight of the patient and the high levels of agitation and risk of aggressive behaviour. Pharmacological interventions include sedative and hypnotic, antipsychotic and mood stabilizing medications and, in some cases, compulsory hospitalization and treatment may be necessary.

13.3.3. Acute Psychosis

An acute psychotic episode is a sudden manifestation of perceptual alterations (typically auditory hallucinations), thought alterations (e.g. persecutory delusions), insomnia, so that agitation, behavioural abnormalities and the risk of aggressive behaviour put the patient in need of medical treatment, whether they are aware or not of their disorder. Patients experiencing an acute psychotic episode may present in the clinics of the general practitioner, in an emergency department or in the psychiatric facilities. The serious distortions of the judgment of reality, the alterations in the state of consciousness, and the emotional involvement compromise the reliability of the information provided by these patients. Therefore, the collection of anamnestic data needs the intervention of additional figures (e.g. family, friends, neighbours, colleagues).

Assessment

It is important to identify possible triggers and precipitating factors, in particular external stressors, the use of recreational drugs, concomitant medical conditions, and adherence to psychotropic medication already in use. Moreover, additional information need to be gathered: previous psychopathological episodes, premorbid personality, social and occupational adaptation, prodromal symptoms, modalities of onset and the evolution of psychotic manifestations , the presence of psychiatric or neurological diseases in the family.

Differential diagnosis

All these information will lead the clinician to orientate between two big and discrete chapters:

- Primary Psychotic Disorders: Schizophrenia, Schizoaffective disturbance, Brief Psychotic Disorder, Major depression with psychotic features, Mania with psychotic features;
- Secondary Psychotic Disorders: psychotic disorder derived from a general medical condition and Substance-induced psychotic disorder.

Management and treatment

The alternative that arises is that between hospitalization, either voluntary or forced, and outpatients' clinics. The severity of the productive symptomatology is not always a sufficient reason to decide on hospitalization. On the contrary, the presence of psychomotor arrest or severe agitation, especially if accompanied by aggressive behaviours, marked confusion or the suspicion of an underlying medical condition should lead to hospitalization. Similarly, an unfavourable familial and social environment with misunderstandings, conflicts, lack of an adequate caregiver represent further elements in favour of hospitalization. In some cases, hospitalization is conducted without the patient's consent, if clinical conditions require so.

Pharmacological treatments include sedative, hypnotics and antipsychotics. In case of acute agitation, intravenous benzodiazepines (e.g. delorazepam) and antipsychotics – either via oral (e.g. haloperidol, clotiapine) or intramuscular (e.g. aripirazole, clotiapine, olanzapine...) administration. When a psychotic disorder is likely to be secondary, it is fundamental to seek and treat the underlying condition.

13.3.4. Psychiatric emergencies due to acute intoxications or withdrawal

Urgent clinical conditions (intoxication and withdrawal) can be associated with illicit drugs (opioids, cocaine, stimulants), alcohol or medications (benzodiazepines, antidepressants, antipsychotics, mood stabilizers).

These topics are discussed in the specific chapters.

The aim of emergency intervention is to quickly stabilize the patient's clinical condition and determine the most appropriate treatment. It is a priority to identify the substance, the route of administration, the quantity, the time passed since the intake, the time of symptom onset.

The purpose of acute drug therapy is to treat the state of intoxication or withdrawal as well as any psychiatric comorbidity.

Assessment

Whenever a patient comes declaring a positive history for drug abuse or the clinical suspicion is high, a toxicological screen and blood alcohol concentration test must be prescribed. Not all hospitals are equipped for dosing medications, in case the best option is to ask the consultation of a clinical pharmacologist or the local poison and drug information service.

Management and treatment

It is fundamental to stabilize vital signs, assure adequate hydration and nutritional support. Withdrawal can be managed with intravenous benzodiazepines (e.g. lorazepam, delorazepam), if agitation or hallucinations are present haloperidol can be added.

13.3.5. Personality Disorders

Personality disorders are “persistent patterns of internal and behavioural experiences that differ or deviate from the expected social and cultural norms causing disruption and distress leading to difficulties in daily functioning” (DSM 5, APA). They typically have onset in adolescence or early adulthood and model the overall functioning of the person throughout all their life. Personality disorders are relatively common: general population prevalence is about 10%, but rates peak up to 25% of primary care patients and 50% of psychiatric outpatients. These patients frequently seek healthcare services intervention and recurrently refer to emergency departments.

The specific disturbs are described in Personality Disorders chapter.

Assessment

In acute settings, the most frequently personality disorders encountered are cluster B Personality Disorder (Borderline, Narcissistic, Histrionic, and Antisocial) due to abrupt emotional dysregulation episodes and tendency to hetero- and self-aggressive behaviour. The risk of violent acts is greater in case of comorbid substance abuse, history of childhood abuse, personal and family history of violence.

The principal and most dangerous reason for emergency department referral is an episode of self-harm or suicidal behaviour. Such behaviours can be sustained by categorical suicidal ideation or have demonstrative purposes towards family or friends.

The clinical interview in acute settings should be focused on clarify the presence of stressors or triggers for the present distress, assess the presence of mood and thought disturbances, assess suicidal ideation and verify the presence of protective factors against future suicidal conducts, run laboratory and toxicological screening exams to rule out substance intoxication.

Management and treatment

Based on the reason of referral, healthcare workers should assess vital signs, treat eventual intoxication, and administer drugs to reduce anxiety or angst: for this purpose, benzodiazepines are first choice drugs, orally or intravenously (e.g. delorazepam, lorazepam).

In case of main mood disturbances, persistent suicidal ideation, absence of a supportive socio-familial network, hospitalization should be proposed to the patient.

13.3.6. Psychomotor agitation

When a patient suffering from a physical or mental pathology changes their level of consciousness, have gross distortion of the judgment of reality, agitation, disorganized gestures up to aggressiveness towards objects or people, so that they express the imminent risk of disorganized or violent behaviour, family members, friends, neighbours other specialty colleagues frequently ask a psychiatric consultation.

Differential diagnosis

- Substance intoxication: one of the most frequent is alcohol intoxication: the typical evolution starts from disinhibition and euphoria; then the person total loses judgment capacity, with impulsive and hetero- and self-aggressive acts, road accidents, various injuries and trauma; then, the subject presents mood depression, and impulsive suicidal behaviour is not rare
- Substance withdrawal: especially from alcohol. At the first stages of *delirium tremens* there are severe alteration of consciousness or cognitive abilities
- Delirium induced by substances: alcohol, anxiolytics, corticosteroids, atropine
- Delirium due to medical condition: metabolic disorders, post-ictal states, head trauma, focal lesions
- Mental retardation
- Dementia: Alzheimer's or vascular type
- Psychotic disorders
- Mood disorders: in particular manic or mixed-mood episodes
- Personality disorders

Risk factors for violent behaviour in agitated patients

- Young age
- Male sex
- Low intellectual, cultural, socio-economic level
- Deviant family environment
- Massive stressful events (childhood abuse)
- Resistance or poor adherence to drug treatment
- A previous history of violent behaviours in the medical history (best probability indicator)

Violence Risk Assessment

The aim of psychiatric emergency consultation is to assess the patient and offer adequate treatment to reduce agitation. The patient might have been conducted in the ED by a family member, or by public force: if so, the patient might be even more threatened and agitated.

The assessment concerns the risk of short-term violence based on the available information. International guidelines on this regard help the clinical team reduce the risk of violence towards healthcare professionals and bystanders.

First, a quiet and comforting milieu should be assured, and the clinician should approach the patient calmly and preventing further escalation in psychomotor agitation. There should not be objects that can be used as a means of aggression, the clinician should keep an adequate distance from the patient avoiding to exhibit a threatening appearance. Moreover, the clinician should stand near a safe exit door, it should be easy to call for rapid intervention, if accompanying people increase the agitation they should be kept away from the room.

Verbal and motor signs that may indicate the possibility of violent behaviours are loud, threatening, or provocative speech, motor hyperactivity, tension; mydriasis; violent impulses or acts against objects.

The patient's requests should be discussed directly, paying attention to them in order to try to establish a collaborative relationship.

Management and treatment

Psychopharmacological therapy can be usefully administered to sedate the agitated patient. A quick sedating therapy can be proposed, while the routine exams are running.

Once the urgency passes, the specific therapy of the condition can be evaluated and discussed with the patient.

- Agitation whose cause is unclear: benzodiazepines and antipsychotics
- Acute alcohol or substance intoxication: antipsychotics
- Delirium due to medical condition: therapy for the medical condition
- Alcohol withdrawal: benzodiazepine
- Psychotic disorder, manic phase: antipsychotics

13.3.7. Suicide

Suicide is the result of a complex interaction of psychological, biological, and social factors. The subject loses the habitual points of reference, feels anguished, frustrated, expresses feelings of hopelessness and helplessness. The will to die might be ambivalent: rather they would like to live but

their anguish is more unbearable than ever. Up to 10% of suicides are committed by people with previous psychiatric hospitalization, but the greatest risk is conferred by a psychiatry disorder diagnosis independent of previous hospitalizations.

The psychiatric pathologies most frequently associated with suicide are:

- Major mood disorders: major depressions and bipolar disorders
- Alcohol abuse
- Schizophrenia
- Borderline Personality Disorders
- Antisocial Personality Disorders

Around 1 million people commit suicide worldwide every year. It is a rare event in children under the age of 12 and becomes more common after puberty, reaching its peak after the age of 65.

Intense depressive experiences with suicidal ideation can be triggered by bereavement, particularly the loss of a partner or a very close person; this ideation can be more intense if the loss is accompanied by conditions of social isolation or dependence on institutions. Other common triggering events can be the breakdown of interpersonal relationships, separations or divorces, emigration. A typically younger age phenomenon is the so-called “Werther effect” (from the novel “The sorrows of young Werther” by W. Goethe): disclosure of suicide through mass media increases the suicide rate for the immediately following period.

Risk factors for suicidal behaviour

- Male
- Age 45-64
- Anniversaries of particular significance
- Unemployment or financial difficulties
- Mourning, especially for spouse’s loss
- Recent separation or divorce
- Recent arrest or legal troubles
- Family or personal history of suicide, previous suicide attempts, drawing up detailed suicide plans, taking steps to implement the plan
- Family history of mental disorder
- Depressive episode, especially at major depression onset or in bipolar disorder
- Significant motor agitation, restlessness and anxiety with severe insomnia

- Marked feelings of guilt, inadequacy and despair; perception of being a burden to others; self-denigration; nihilistic delusion
- Delusional ideation with somatic content (fear of being suffering from a serious or lethal disease) or of ruin
- Personality disorders, especially borderline or antisocial
- A chronic, painful, disabling physical disease, especially in previously healthy patients
- Alcohol or drug abuse especially if recent use has increased
- Use of drugs that can contribute to suicidal behaviours (ex, abruptly stopping paroxetine and some other antidepressants can cause increased depression and anxiety, which in turn increase the risk of suicidal behaviours)

Assessment

Suicide is frequently the terminal act of a history of suicidal ideation, often communicated to others but not adequately considered. Patient management should aim at reducing social risk factors for suicide.

The physician in suspicion of suicide risk should listen carefully and refrain from any judgment; they should reconstruct the patient's history and verify the social and family support available to the patient. It is important to discuss the suicidal ideation with the patient without fear that this could increase the risk: conversely, it could be of help to explore hopelessness, anhedonia, insomnia, anxiety and psychomotor agitation, and the patient could feel relief seeing that their profound distress can be talked about and understood by the clinician. It often happens that the patient at risk of suicide presents with the following features: pervasive sadness, depressed mood, affirmations like "I wish I was dead", "I can't do anything", "I can't go on like this anymore", "I'm a loser", "Others will be better off without me". Anyone who threatens to harm or kill themselves, or looks for means (e.g. firearms, drugs...), or talks about death, which is unusual for such a person, should be considered at high risk for suicide. Furthermore, a high risk of suicide is associated with feelings of despair, uncontrollable anger and impulsivity, acting recklessly or risky, seeking revenge, feeling trapped and without a way out. The risk is also associated with alcohol and drugs consumption; separation from friendships, family, and social contacts; besides anxiety, agitation and sleep disturbances are always identifiable in the presence of suicide risk. The individual at risk often reports marked changes in mood, lacks reasons to live, and cannot identify the meaning of life.

The clinician should focus on the patient's psychic status and physical examination (especially if there has been a suicide attempt). The most adopted suicide methods in Europe are hanging, defenestration, gunshot, and drowning. In the United States, the use of firearms is more common,

given the ease of obtaining guns and rifles in stores. Inhalation of vehicle exhaust gases appears to be significantly increasing among suicidal methods. Among the para-suicidal methods, on the other hand, drug overdose (especially benzodiazepines) and, to a much lesser extent, cutting (e.g. at the height of the wrists) are common self-harm methods.

In the case of suicidal behaviours, the psychiatrist might ask "Why now?" as to explore the latest vicissitudes that led to the act. Suicidal behaviour is typically one of the most frequent motivation for hospitalizing a patient: it permits the psychiatrist to observe the patient in a protective environment preventing further acts, to collect a complete history of the patient, to choose the best pharmacological and multidisciplinary treatment, to address any drug side effect, and to take time to help the person rebuild social relationships, or create new ones (e.g. getting in touch with family, friends, partners or children...).

Suggested readings

1. American College of Emergency Physicians Clinical Policies Subcommittee (Writing Committee) on the Adult Psychiatric Patient, Nazarian DJ, Broder JS, Thiessen MEW, Wilson MP, Zun LS, Brown MD. Clinical Policy: Critical Issues in the Diagnosis and Management of the Adult Psychiatric Patient in the Emergency Department. *Ann Emerg Med.* 2017 Apr;69(4):480-498. doi: 10.1016/j.annemergmed.2017.01.036. PMID: 28335913.
2. Baracaia S, McNulty D, Baldwin S, Mytton J, Evison F, Raine R, Giacco D, Hutchings A, Barratt H. Mental health in hospital emergency departments: cross-sectional analysis of attendances in England 2013/2014. *Emerg Med J.* 2020 Dec;37(12):744-751. doi: 10.1136/emermed-2019-209105. Epub 2020 Nov 5. PMID: 33154100.
3. Barsky AJ, Orav EJ, Bates DW. Somatization increases medical utilization and costs independent of psychiatric and medical comorbidity. *Arch Gen Psychiatry.* 2005 Aug;62(8):903-10. doi: 10.1001/archpsyc.62.8.903. PMID: 16061768.
4. European Drug Report 2015. Trends and developments: European Monitoring Centre for Drugs and Drug Addiction. Lisboa, Portugal: EMCDDA; 2015.
5. Fleury MJ, Fortin M, Rochette L, Grenier G, Huynh C, Pelletier É, Vasiliadis HM. Assessing quality indicators related to mental health emergency room utilization. *BMC Emerg Med.* 2019 Jan 15;19(1):8. doi: 10.1186/s12873-019-0223-8. PMID: 30646847; PMCID: PMC6332534.
6. Nentwich LM, Wittmann CW. Emergency Department Evaluation of the Adult Psychiatric Patient. *Emerg Med Clin North Am.* 2020 May;38(2):419-435. doi: 10.1016/j.emc.2020.02.001. PMID: 32336334.
7. Parmar P, Goolsby CA, Udompanyanan K, Matesick LD, Burgamy KP, Mower WR. Value of mandatory screening studies in emergency department patients cleared for psychiatric admission. *West J Emerg Med.* 2012 Nov;13(5):388-93. doi: 10.5811/westjem.2012.1.6754. PMID: 23359831; PMCID: PMC3556945.
8. Pluym ID, Holliman K, Afshar Y, Lee CC, Richards MC, Han CS, Krakow D, Rao R. Emergency department use among postpartum women with mental health disorders. *Am J Obstet Gynecol MFM.* 2021 Jan;3(1):100269. doi: 10.1016/j.ajogmf.2020.100269. Epub 2020 Oct 20. PMID: 33103100; PMCID: PMC7574686.

9. Robinson RL, Grabner M, Palli SR, Faries D, Stephenson JJ. Covariates of depression and high utilizers of healthcare: Impact on resource use and costs. *J Psychosom Res.* 2016 Jun;85:35-43. doi: 10.1016/j.jpsychores.2016.04.002. Epub 2016 Apr 13. PMID: 27212668.
10. Sood TR, Mcstay CM. Evaluation of the psychiatric patient. *Emerg Med Clin North Am.* 2009 Nov;27(4):669-83, ix. doi: 10.1016/j.emc.2009.07.005. PMID: 19932400.
11. Sweeny A, Keijzers G, O'Dwyer J, Stapelberg NC, Crilly J. Patients with mental health conditions in the emergency department: Why so long a wait? *Emerg Med Australas.* 2020 Dec;32(6):986-995. doi: 10.1111/1742-6723.13543. Epub 2020 Jun 8. PMID: 32510774.
12. Tucci VT, Moukaddam N, Alam A, Rachal J. Emergency Department Medical Clearance of Patients with Psychiatric or Behavioral Emergencies, Part 1. *Psychiatr Clin North Am.* 2017 Sep;40(3):411-423. doi: 10.1016/j.psc.2017.04.001. PMID: 28800798.
13. Urbanoski K, Cheng J, Rehm J, Kurdyak P. Frequent use of emergency departments for mental and substance use disorders. *Emerg Med J.* 2018 Apr;35(4):220-225. doi: 10.1136/emermed-2015-205554. Epub 2018 Jan 8. PMID: 29311114.
14. Wheat S, Dschida D, Talen MR. Psychiatric Emergencies. *Prim Care.* 2016 Jun;43(2):341-54. doi: 10.1016/j.pop.2016.01.009. PMID: 27262012.