Emergency psychiatry and crisis intervention

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In this review, we introduce the *concept and classification* of emergency psychiatry, followed by the *clinical aspects* of emergency psychiatric care (epidemiology, etiology, diagnosis, differential-diagnosis, course, prognosis, treatment), and the most important *practical information* (e.g. interview-technique, management of aggressive behaviour, etc.). Next, we review the most common psychiatric *emergency situations* that may occur in daily clinical practice, and finally discuss the *legal aspects*. Because of its special importance, we address *suicidal behaviour*, *psychological crisis* and *crisis intervention* in a separate subchapter.

1. Definition and classification of emergency psychiatry

From a general medical point of view, *medical emergency* is a change in health that would result in immediate life-threatening situation or would cause severe or permanent health impairment in the absence of immediate medical care.
Psychiatric emergency is defined as threatening behaviour (that is, a direct and severe threat to one's own or others' life or health) that is caused by a mental disorder/psychiatric condition or addiction.
From a *legal point of view*, there is a need for *emergency psychiatric treatment* when patients exhibit direct threatening behaviour due to their psychiatric condition or addiction, and this can only be eliminated by immediate psychiatric treatment.
There are many acute situations in emergency psychiatric care where it is difficult to distinguish between a *physical (somatic, organic)* or *mental (psychological, psychiatric)* etiology in the background of the psychopathological symptoms. However, this should be rather important, because it determines the appropriate location and method of treatment. In each case, it is necessary to individually assess what causes the primary emergency (or the vital threat), the current somatic or psychiatric condition (or their potential complications).

Psychiatric emergency, without other medical (physical) emergency: In "pure" psychiatric emergency, patients pose a direct danger to themselves or to their environment because of their behaviour. They can be hostile, agitated, aggressive, or potentially offensive, but negativism, stupor or catatonia can also be dangerous. "Mild" psychiatric conditions (panic, somatoform disorders, etc.) can also lead to emergencies, and patients often resort to various forms of emergency care. Although patients are not in imminent danger in such cases, they, by the nature of their illness, are unable to accept it and often consider their condition to be life-threatening.
Psychiatric illness with consequent medical (physical) emergency: Psychiatric care depends on the physical/somatic condition of the patient. Psychiatric hospitalization is required only when the somatic emergency is no longer present, and the patient's psychological state need further psychiatric treatment.
Medical (physical) emergency associated with psychiatric symptoms: Generally, these patients require primarily somatic treatment and psychiatrist is present rather than a consultant, who may recommend symptomatic treatment to manage the - often transient - psychopathological symptoms. Typical conditions are some forms of delirium, which can have several origins (alcohol or drug withdrawal, central anticholinergic syndrome, severe physical illness, metabolic encephalopathies, postoperative condition, etc.).
Medical (physical) emergency with a history of psychiatric illness: Positive psychiatric history in emergency care can often provide a point of reference, but one should be careful with this,

and it should not determine our decision. Stigma or prejudiced decision-making can be harmful and endanger the patient's life.

2. The clinical aspects of psychiatric emergency

2.1. Epidemiology

Women and men use psychiatric emergency ambulances on an equal basis, with more need for care for single people, the homeless and those with lower social status. Suicidal and violent behaviour are account for approximately 20% and 10% of psychiatric emergencies, respectively. Regarding mental disorders, affective and adjustment disorders, psychotic conditions and alcohol problems are the most common. Most emergency cases are present on duty or at night, but, contrary to popular belief, no difference was found in the days, months, or holidays. About 40% of emergency patients require further psychiatric hospitalization.

2.2. Etiology, diagnosis, differential-diagnosis

Emergency care requires a quick and accurate decision within a short period of time, as the first steps of care are decisive for the prognosis. The first step is to assess the potential *vital threat*, then to determine whether the patient's *condition is endangering or not* and *what causes it* (physical or mental disorder). After weighing up the risks, select the safest and most effective care for the patient.

Although rapid diagnosis is essential in some situations (e.g. severe benzodiazepine intoxication), in other cases it may be sufficient only to eliminate the symptoms first (e.g. aggression, restlessness). It is important to *exclude possible physical/somatic etiological factors* as soon as possible, as various traumas, physical illnesses, substance abuse, cerebrovascular events, metabolic disorders, different medications can all cause psychopathological symptoms and behavioural changes. The purpose of the diagnostics is to detect the underlying physical condition, if there is, as *causal therapy* of psychopathological symptoms can only be planned based on the underlying condition. The aim of *symptomatic therapy* is to relieve symptoms and facilitate diagnostics.

The diagnostics begin with the *observation* (face, tongue, skin, breath, smell, injuries, behaviour) and continues with the *exploration*. During exploration patients may first express their main complaints in their own words. If this is not possible, we try to assess the patient's current status with specific and explicit questions. In addition to these, we also ask about specific symptoms regarding mood, anxiety, sleeping, appetite, weight changes, perceptional (hallucinations) and thought (delusions) disturbances, cognitive functions, suicidal intentions. It is important that the doctor’s attitude throughout the interview is firm, but at the same time reassuring, thus creating a safe and professional environment for the patient and the operating staff.

Diagnostic procedure includes a thorough *physical examination* (including neurological status), an accurate *anamnesis*, and possibly *hetero-anamnesis*, which can be a key-point in specific cases. It may be necessary to perform *basic routine tests*, such as heart rate, blood pressure, and body temperature measurements, ECG, chest X-ray, laboratory tests (ions, blood glucose, liver and kidney functions, blood count, inflammation parameters, thyroid function, blood gas values, etc.) and possibly toxicology (mainly from urine, or blood) and serum drug levels (lithium, carbamazepine). It may be necessary to perform brain or other imaging (CT, MRI), especially in the case of trauma, or EEG examination in case of suspicion of certain neurological diseases. In uncertain cases, a neurological or internal medical *consultation* is recommended, or ER/ICU care may be required.

2.3. Course, prognosis

The *course* and outcome of emergency psychiatric cases depends on rapid and adequate diagnosis and intervention. If an organic/physical cause comes up, the patient continues to be treated in the emergency room or appropriate somatic ward. In these cases, it is advisable to indicate psychiatric symptomatic treatment to ensure transportability, appropriate diagnostics and patient safety (e.g. sedation for transportation or for more detailed diagnostics).
If the first differential-diagnostic decisions and the acute intervention in emergency care are made in a timely and appropriate manner, then psychiatric emergency conditions are basically with good *prognosis*. The underlying disease determines the long-term outcome of the condition.

2.4. Treatment

Biological and/or *psychological* treatments used in emergency care are aimed at eliminating emergency (direct, threatening behaviour), preventing further deterioration, stabilizing the condition, preparing appropriate diagnostics, preparing causal therapies, and establishing a therapeutic relationship.

Psychotherapy
Although non-drug treatments used in psychiatric emergencies contain psychotherapeutic elements, they cannot be termed as "lege artis" psychotherapies as they usually do not provide the most basic conditions for that (independent decision-making, contracting, etc.). A combination of the different elements of several psychotherapeutic techniques can be utilized well in emergencies (e.g. certain techniques of supportive or behavioural therapy, psycho-education, etc.).

Pharmacotherapy
In general, *benzodiazepines (e.g. clonazepam)* and *antipsychotics (e.g. haloperidol)*, or their combinations are the most commonly used medications in emergency care.
Intramuscular haloperidol is still widely used in severe *psychotic conditions* and in *violent/aggressive behaviour* associated with mental disorders and certain physical conditions or intoxications (e.g. alcohol, hallucinogens). An exception, however, is intoxication with agents that have a significant anticholinergic effect (e.g. biperidine or jimson-weed) when benzodiazepines are recommended, as the anticholinergic effects of antipsychotics may further worsen the condition. The usual single dose of haloperidol in acute psychiatry, depending on the condition and weight of the patient, is 5 to 15 mg, which may be repeated in every 30 to 60 minutes to achieve the desired effect. Generally, a dose greater than 50 mg/day (up to 100 mg/day in exceptional cases) is not warranted.
The primary emergency psychiatric medication for *anxiety* (primary anxiety disorders or anxiety associated with other mental or physical disorders) is benzodiazepines. Alprazolam (0.5 to 2 mg single dose) and clonazepam with a single dose ranging from 0.5 to 2 mg orally or intramuscularly or intravenously (slowly, over 1-2 minutes administration) are used most commonly. Besides these, a single dose of 5 to 10 mg of diazepam (PO, IM or IV) or lorazepam are also widely used. These medications can usually be repeated 2-4 times a day.
Acute *extrapyramidal side effects* (e.g. acute dystonia, parkinsonism, akathisia) are most responsive to biperidine, procyclidine, benztropine (2 mg PO or IM), diphenhydramine (50 mg PO or IV), or benzodiazepine may also be given.
In *acute psychotic conditions*, besides haloperidol – since some second-generation antipsychotics are now available in parenteral formulas – injection of olanzapine, aripiprazole or ziprasidone may be used, particularly for those patients who previously responded well to these medications. In addition, risperidone or amisulpride in the form of a solution and

olanzapine in the form of oro-dispersible tablets may also be useful in the treatment of acute psychotic conditions.
In *impulsive, agitated conditions*, especially when associated with a manic episode, the administration of valproate, carbamazepine or lithium may be considered, however, they do not have an acute onset of action.
Emergency situations may include problems with the patient's *acceptance of medication* (because of lack of insight), *administration of the drug* (non-cooperative patients), or the *time till the medication will work* (patients with direct threatening behaviour). Parenteral (IM or IV) and more frequent (lower doses, repeatedly) administration of drugs, especially with sedative effect/side-effect may be beneficial in these cases.
Consideration of *combinations and interactions* is also important in emergencies. Concomitant use of antipsychotics and benzodiazepines is common and useful (e.g. haloperidol + clonazepam), because their additive effects may be helpful. In case of alcohol intoxication, administration of benzodiazepines may be associated with increased risk, and other psychotropic medications should also be used with caution. Pharmacokinetic and pharmacodynamic interactions cannot be ignored, and it has to noted, that drugs may accumulate during repeated administrations and sudden onset of severe sedation, hypotension and marked side-effects may occur.

3. Specific and practical issues in emergency psychiatry

3.1. Interview-technique, attitude

During an *emergency interview*, one need to gather the most important information as quickly as possible. In addition to observe and explore the patient, this often requires the collection of *hetero-anamnestic* data from the relatives, the referring physician, ambulance staff, or accompanying police. Careful listening to the patient and targeted questions will help to quickly assess the emergency situation. The physician has to be *clear, unambiguous, yet attentive, calm* to develop appropriate doctor-patient relation and to control the situation. For *phone calls*, it is important to clarify the details of the call (personal data, location, etc.) as soon as possible.

3.2. Management of aggressive behaviour

When treating aggressive patients, the assistance of *nursing staff* and *security* may be required. If the patient has been transported by *ambulance*, their staff must be present until the patient is safely placed. Occasionally, the *police* may accompany the patient, or the police need to be called for help in case of acute threatening behaviour or when patients carry a weapon. Disarming the patient is the task of the police.
An important consideration when treating a threatening patient is the *protection of the physician's own person*, as he/she manages and coordinates the care. However, irrational fear from the patients and their aggression may impair clinical judgment and lead to excessive sedation or unnecessary restraint. Therefore, prior to meeting the patient, it is desirable to collect as much information as possible (e.g. from the ambulance, medical records, clinical database) and to be prepared for any violent behaviour. The examination/emergency room shall be constructed in a safe manner and shall be operated by qualified and trained staff. The equipment of the examination room shall not allow for unexpected, dangerous actions or objects suitable for self-harm or attack. The physician should not stay alone with a dangerous patient and always need to have staff nearby. Approach the patient slowly, tactfully (keeping personal distance), using a natural but determined tone, expressing a willingness to help. Continuous communication helps keep connected, and some questions can help channelize the aggression: what's wrong, why are you angry, who do you angry with, how can we help? It is important for the patient to feel safe, which can be achieved through a determined but reassuring attitude by

the staff. It is also important to be aware that anger, hostility, verbal aggression (e.g. swearing, profanity) is not about the physician, but is about the patient's current state or situation.
The threatening *patients* have to be protected either from themselves or from others, and *others* and the environment has to be protected from the patients. If the patient's behaviour is threatening, he/she should first be advised that aggressive behaviour is not acceptable. Then try to verbally convince the patient, and later instruct (but not in a threating way) to cooperate. Then the patient needed to warn that restriction may be imposed if necessary. This may include chemical (medication) and physical restraint measures. In the event of a restraint, a sufficient number of trained staff should be present. For extremely agitated patients, it may be necessary to restrain all four limbs, but usually only temporarily, until the medication may have its effect. In rare cases, longer, continuous restraint may be required (for some reason, no adequate amount of drug may be given, it takes longer to achieve an adequate drug effect), in which case detailed justification and documentation is required.

3.3. Informing and documentation

In addition to *informing* the patient, it is recommended to provide brief, concise information about the patient's condition and the expected risks and outcomes to the accompanying relatives. In the case of emergency care, it may also be important to provide psychiatric care (medication, supportive psychotherapeutic intervention) to the *relatives* of the patient being treated for emergency or crisis situations. In addition, psychological support to family members (children, spouses) or witnesses who may be abused or hurt by the aggressive patient may also be required, to prevent further traumatization or reduce anxiety, guilt, etc. It is important to *document* every step of the emergency procedure and to record any changes in the patient's condition.

4. The most common conditions requiring emergency psychiatric care

4.1. Mental disorders

Acute psychotic conditions

Differential-diagnosis: An acute psychotic condition may occur as a decompensation of a patient with an already known "major" psychiatric disorder (schizophrenia, bipolar disorder, schizoaffective disorder, major depressive disorder, borderline personality disorder, etc.), or may occur "unexpectedly" as a first psychotic episode. Besides these mental disorders, physical illnesses (metabolic disorders, neurological disorders, etc.) or substance abuse (drug intoxication or drug-induced disorder) should be considered as etiological factors. During emergency care of a first psychotic episode, the primary goal is not to make an immediate accurate diagnosis, but to quickly relief symptoms.
Treatment: Antipsychotic medication is the basis of the treatment, with add-on anxiolytics, if necessary. First-generation antipsychotics (especially haloperidol 5-20 mg orally or intramuscularly) has been used as first-line treatments however, there is a growing body of evidence on the efficacy of second-generation antipsychotics in emergencies as well (especially those available in injectable or oro-dispersible formula). In addition to medication, psycho-education and supportive therapy is strongly recommended.

Anxiety

Differential-diagnosis: Anxiety often occurs associated with substance abuse (e.g. amphetamine intoxication, benzodiazepine withdrawal, etc.) or physical illnesses (e.g. hypoglycaemia, hypocalcaemia, myocardial infarction, etc.), in which cases the thoroughness of the physician may save the patient's life. Anxiety often appear as an accompanying symptom of other major psychiatric disorders (e.g. schizophrenia, delusional disorder), and may be a

warning sign before or during decompensation. In other mental disorders, anxiety itself is the leading symptom, such as in panic disorder, acute stress disorder, post-traumatic stress disorder, phobias or in some adjustment disorders. Anxiety may also often be associated with depressive disorders.
Treatment: In emergency, besides verbal interventions, oral or parenteral benzodiazepines (clonazepam, diazepam, alprazolam, lorazepam) are used. The most commonly used injectable is clonazepam (1-2 mg IM or slowly IV), orally mainly alprazolam (0.25-2 mg) or clonazepam (0.5-2 mg) is used, repeatedly, if needed. After the emergency care, depending on the etiology, it is to be decided whether there is a need for follow-up, and psychotherapeutic/psychiatric out-patient treatment, or acute hospitalization is needed.

Manic episode
Manic episode requires acute psychiatric admission. In most cases, there is a lack of insight, but at as threatening behaviour can occur, restrictive measures may need to be taken.
Differential-diagnosis: Bipolar disorder, drug intoxication (e.g. amphetamine), drug-induced psychotic disorder, schizoaffective disorder, other organic affective disorders.
Treatment: Emergency treatment of mania usually requires the use of a parenteral antipsychotic medication and, where appropriate, high-potency benzodiazepines (especially clonazepam or lorazepam). Mood-stabilizers, such as lithium or valproate should also be started. Of the antipsychotics, the first step is usually haloperidol or zuclopenthixol (available as an acutard injection as well), but olanzapine (as an injection or oro-dispersible tablet), aripiprazole (as an injection), risperidone (also available as a solution) or clozapine may also be used. In order to avoid side effects (e.g. over-sedation), it is preferable to administer lower doses several times a day. Antipsychotics and especially benzodiazepines, have a rapid onset of action, but the antimanic effect of mood-stabilizers occurs after a few days.

Depression
Cardiovascular and other morbidity and mortality in depressed patients is higher than in the average population. These patients are more likely to be admitted to emergency care because of their psychiatric or non-psychiatric symptoms. Of psychiatric conditions, suicide attempt, severe depressive stupor or negativism, anhedonia, extreme anxiety, or sleep disturbance may require emergency care.
Differential-diagnosis: It is important to exclude organic affective disorders (associated with physical or CNS illness) and drug-induced (exogenous) depressive disorders. In addition, current stressors (reactive) can often be discovered in the history.
Treatment: Antidepressants should be started as soon as possible. In more severe cases, higher doses of SSRIs or dual-acting agents (mirtazapine, venlafaxine, duloxetine) are used, sometimes in combination. Anxiety can be a leading symptom, often it has to be resolved first. In the case of psychotic depression, a temporary use of antipsychotics may be warranted. Furthermore, some second-generation antipsychotics may have anti-depressant or anxiolytic effect as well with sedative (quetiapine, olanzapine) or non-sedative (aripiprazole) potential.

Other mental disorders
Anorexia nervosa can also develop into a serious, even life-threatening condition that requires emergency psychiatric care. Because a significant proportion of such cases primarily lead to somatic or even vital threats, internal medicine or intensive care unit may be required initially. Further treatment may be recommended in specialized eating disorder centres.
Severe *sleep disturbances* may also occur in daily emergency practice, in which case benzodiazepines or non-benzodiazepine hypnotics (z-drugs) are recommended. If sleep

disturbances are associated with depressive disorders, antidepressants with sedato-hypnotic effects (e.g. mirtazapine, mianserin, trazodone, amitriptyline) are recommended.

4.2. Addictions

Intoxications

The acute care of intoxications requires special toxicological and oxyological preparedness and background, access to intensive care, special diagnostics and availability of antidotes. Primary care for intoxications is therefore the responsibility of emergency/intensive care units. Treatment of intoxicated patients in psychiatric wards without adequate background is not recommended until patients are physically stabilized.

Differential-diagnosis: Besides alcohol and benzodiazepine intoxications, the use of various "designer" and synthetic drugs has become common. The diagnosis is established based on the symptoms (mental, physical) and toxicology (urine, blood).

Treatment: In case of acute intoxication, the most important is to prevent further ingestion of the drug, to remove it as soon as possible (vomiting, gastric lavage, infusion, forced diuresis) and to suspend its effect (with specific antidotes). Consciousness, vital signs, cardiovascular and respiratory parameters should be carefully monitored. According to current recommendations, vomiting or gastric lavage is generally not recommended beyond 6 hours after ingestion. Forced diuresis is often used, although the effect – because several drugs are largely protein-bound in the blood – is not always clear. Antidotes may be life-saving, in the case of benzodiazepine intoxication, flumazenil may even be used ex juvantibus (0.3-0.5 mg IV), or naloxone (0.4-2 mg IV) in opiate intoxication. Following the administration of flumazenil, restlessness, agitated behaviour may occur, which may require sedation. It has to be highlighted, that the half-life of flumazenil is shorter than that of most benzodiazepines, therefore continuous monitoring is required even after intoxication symptoms improved, as they may worsen again after the flumazenil effect ceased. In cases of alcohol intoxication or pathological intoxication, when those are associated with aggressive, threatening behaviour, sedation is often required. Haloperidol and/or benzodiazepines may be given, but with caution. Haloperidol should be used with caution because of its cardiac side effects (e.g. QTc prolongation, arrhythmia), benzodiazepines may have additive effects (worsening of consciousness, respiratory arrest, coma) or may cause paradoxical reaction. In case of intoxication with amphetamine, benzodiazepine may be the first-line treatment however, it should be taken into account that the patient may have used other drugs and alcohol as well. In the case of intoxications with anticholinergic agents, delirium syndrome may develop, and benzodiazepine is recommended primarily, because the possible anticholinergic side effects of antipsychotics may further worsen the symptoms. In case of acute intoxication caused by cannabis or hallucinogenic agents, transient psychotic symptoms and behavioural disorders may occur, therefore antipsychotics, especially haloperidol should be administered.

Withdrawals

Treatment of withdrawals often occur in psychiatric wards. Withdrawal symptoms include tremor, sweating, anxiety, irritability, hypertension, tachycardia, vegetative symptoms, and delirium (with fluctuating disturbance of consciousness, hallucinations, etc.) may also develop. Depending on the severity of the condition, prodrome, predelium, and delirium are distinguished. Additional symptoms depend on the addictive substance (alcohol, drugs, etc.).

Differential-diagnosis: metabolic disorders (diabetes, thyrotoxic status, liver failure, anaemia, etc.), head and other injuries (especially in alcoholic patients), and possible infectious diseases (meningitis, HIV, hepatitis, etc.). In case of uncertain anamnestic data, additional examinations (imaging, lab) are required. Seizures during withdrawal (in case benzodiazepine or alcohol dependency) may occur and can lead to further complications.

Treatment: For alcohol or benzodiazepine withdrawal, benzodiazepines (e.g. clonazepam) are the first-line treatments. Antipsychotics (usually haloperidol) should be given only in case of delirium, when hallucinations, psychotic symptoms, or agitated behaviour are associated with the withdrawal. The main pillars of care are sedation (benzodiazepines), fluid and ion balance (infusion, natrium, potassium and magnesium), blood pressure (antihypertensives) and heart-rate (beta-blocker) control, cardiac support, vitamin B (thiamine) and, if necessary, anticonvulsants (e.g. carbamazepine or valproate). In opiate withdrawal, methadone can be given, sometimes combined with benzodiazepines, anticonvulsants, and haloperidol.

4.3. Geriatric and geronto-psychiatric conditions

In the elderly, confusion, delirious episodes, agitation and aggressiveness may require psychiatric emergency care. These symptoms are often associated with dementia or caused by an underlying physical condition (exsiccation, infection, such as pneumonia or urinary tract infection). Due to the potential paradoxical effects of benzodiazepines in the elderly their use is generally not recommended. Non-sedative antipsychotics such as tiaprid is more useful, and among second-generation antipsychotics, quetiapine and/or risperidone are very effective in controlling delirious episodes as well as agitation and behavioural disturbances in the elderly. However, their use may be limited by their approved indications and side effects profile (QTc prolongation, sedation, postural hypotension, parkinsonism). In case of severe agitation, low-dose oral or intramuscular haloperidol (2.5 to 5 mg single dose) may also be necessary. However, besides symptomatic therapy, clinician should always look for the etiology, and apply causal therapy. When medicating elderly, the "*go slow, stay low*" routine should be followed due to potential hypersensitivity, paradoxical reactions, reduced metabolism and renal function.

4.4. Physical disorders

The management of these physical disorders is the competence of the emergency departments and the related somatic department. Symptomatic therapy in the form of psychiatric consultation is recommended for the treatment of associated psychopathological symptoms or for behavioural disturbances. If restrictive measures are required (for example in case of agitation, etc.), they may be applied with appropriate documentation in other medical wards as well. Once the emergent somatic problems are resolved, or if the risk of psychiatric symptoms is greater than that of the somatic illness, treatment may continue in the psychiatric ward.

4.5. Emergencies associated with psychotropic medications

Clozapine has some rare but clinically significant side effects that may require acute care. These include granulocytopenia/agranulocytosis, seizure, or anticholinergic delirium. The combination of clozapine and carbamazepine may cause bone-marrow related complications (haematopoietic disorders), and the clozapine-benzodiazepine co-administration may increase the risk of respiratory failure and pulmonary oedema.

In addition to clozapine, other *drugs with anticholinergic* effect (e.g. biperiden) can also cause euphoria, confusion or delirium.

Other acute side effects of *antipsychotics* may include acute extrapyramidal symptoms (dystonia, akathisia, and parkinsonism). Rhabdomyolysis or, rarely, neuroleptic malignant syndrome may also occur, which, when suspected, requires immediate intensive care.

With previously used *antidepressants* several side effects were observed. Patients taking non-reversible MAO-inhibitors had to be on a strict diet because of a hypertonic crisis ("cheese reaction"). Tri- and tetracyclic antidepressants had several central and peripheral side effects, including serotonin syndrome. SSRIs and dual-action antidepressants have a relatively safe side-effect profile.

In case of acute symptoms (e.g. tremor, confusion, etc.) of a patient on *lithium* therapy, lithium intoxication should always be considered and serum lithium level has to be checked.
Withdrawal symptoms, *rebound* and *paradoxical* reactions with benzodiazepines and *discontinuation syndrome* with SSRIs are clinically common and has to be considered.

4.6. Other common symptoms and syndromes require psychiatric emergency

These *categories* are not mental disorders, but they often appear in everyday practice, allowing the patient to be admitted to a psychiatric ward (confused, aggressive, regressive, negativistic, suicidal). We briefly describe the most important clinical "categories", highlighting the causes and therapeutic aspects. We deal with the psychological crisis and the suicidal behaviour in a separate subchapter.

"Confused" patients

"*Confusion*" actually refers to cognitive dysfunctions. In a narrow sense it means disorientation, but in a broader sense it also includes disturbances of attention, memory, perception or thinking. In fact, confusion is often used in the meaning of delirium, which, however, is a combined disturbance of the alertness and integrity of consciousness. Therefore, since "confusion" is a general category, the specific psychopathological disturbances should be referred.
The most common *causes* of "confusion" are advanced dementia, delirium syndrome, intoxication or withdrawal of a substance, various metabolic disorders (hypoglycemia, uremia, etc.), ion and fluid imbalance, and other physical and central nervous system disorders. In addition to these organic disorders, severe psycho-social stress may lead to "confusion", usually on the basis of dissociative mechanism. In addition, the term "confused" is sometimes used for psychotic patients' incoherent and disorganized thinking behaviour.
For this reason, "confusion" does not have a unified *therapy*, but the cause has to be explored and treated.

"Aggressive" patients

The "*aggressive*" patient category is also a generic term that can include restless, irritable, agitated, impulsive, hostile, threatening, offensive, and violent behaviour. Aggression can occur in thought, verbally, or in the form of auto-aggressive (self-harm, suicide) or hetero-aggressive behaviour. Hetero-aggression can be directed against objects and persons. Aggressive behaviour can occur in acute psychoses, mania, alcohol-drug intoxication or withdrawal, dementia, delirium, mental retardation, and in some personality disorders (antisocial, borderline, organic personality disorder).
Aggressive behaviour is often a reason for emergency psychiatric care. For many cases of aggressive, agitated behaviour, police take the first action and decide about a potential need for medical/psychiatric care. In such cases, it is necessary to assess whether the condition may be the caused by mental disorder that requires *psychiatric treatment* or whether further *police intervention* is required.
Aggression must be distinguished from *agitation* (psychomotor restlessness) and *akathisia*. Akathisia is an extrapyramidal side effect of antipsychotics and requires different treatment (antipsychotic dose reduction, beta blocker, benzodiazepine, anticholinergic).
In case of aggressive behaviour, *benzodiazepines (e.g. clonazepam 1-2 mg)* and/or *antipsychotics (e.g. haloperidol 5-20 mg*) are recommended (usually administered parenterally), and physical restraint may be needed for the safety of the patients and others till medications have their effect.

"Regressive" patients

The so-called "*regressive*" patients are verbally inaccessible, barely communicating, or maybe crying and shouting, falling down the floor, beating or biting themselves. In many cases, the cause of the behaviour cannot be ascertained in the acute phase, because the patients are essentially inaccessible and do not communicate adequately. However, verbal interventions or benzodiazepines sooner or later resolve regressive behaviour, but it may reappear in various stress situations as an immature self-defence mechanism.

"Negativistic" patients
Negativism is also a broad category, including passive or active negativistic behaviour, with refusal of cooperation, communication (mutism), eating or moving at all. It is often associated with apathy, anhedonia, abulia. Its severe form is a negativistic stupor, often caused by psychotic, depressive or catatonic conditions. It may occur in association with some severe physical diseases (neurological disorders, endocrinological disease, malignancy). Emergency care is often given due to vital threat, and patients are often hypotensive, anaemic, and exsiccated. Because of the above, it is important to perform a detailed medical history, physical and diagnostic examinations (laboratory, EEG, brain imaging). In addition to symptomatic therapy (somatic treatment, nutrition, care, decubitus prevention, etc.), specific treatment is determined by the cause. Benzodiazepines are generally effective as symptomatic first-line treatments, however, in case of psychotic background antipsychotics, in case of depressive etiology, antidepressants to be given.

5. Ethical and legal issues in emergency psychiatry

During emergency psychiatric care an emphasis should be placed on the enforcement of patients' rights. As far as possible, patients should be made aware of their condition, of the necessary interventions, alternative treatment options and the risks of non-treatment.

5.1. Informing, consenting
Giving *information and consent* are general rules. According to legal regulations, as long as patients exhibit dangerous behaviour, the patients' consent may be waived in respect of restrictions aimed at eliminating them. However, the same section of the regulation also states that after the end of the threatening behaviour, the patient should be given detailed information in accordance with the general rules.
In emergency psychiatry, it is often the case that other professionals seek *consultational psychiatric examination* to determine whether or not a patient may refuse certain interventions (such as surgery) or interrupt hospital treatment. It is clearly the responsibility of the attending physician to decide on these issues, and the psychiatric consultant cannot make any statement on them. Psychiatrist may only declare whether the patient is currently *incapacitated or not*.
As a general rule, the patient's *right to self-determination* cannot be restricted. In practice, however, in many cases, some disturbances of consciousness, or severe dementia, etc. is the reason for the refusal of care, and to some extent the patient may be considered to be incapacitated. If the incapacitating condition is due to some form of mental disorder, it is reasonable to seek a psychiatrist's consultation. Based on the psychiatric opinion, the attending physician should decide on what to do next, whether to accept the patient's statement, whether to perform a particular intervention or not, etc. It is also important to emphasize that informing the patient and accepting the consent is the sole responsibility of the attending physician and cannot be "replaced" by the psychiatrist under any circumstances.

5.2. Rights and obligations

During emergency psychiatric care, both the patient and the physician have different *rights and obligations*. The use of coercive, humiliating means should be avoided in order to respect human dignity. Any restrictions imposed on the patient should be limited to the minimum necessary and of the shortest duration. The use of methods that cause pain or injury is impermissible and unnecessary. The patient and the patient's legal or authorized representative must be notified immediately of the imposition of restrictions.
Nowadays, *personal and patient rights* are increasingly emphasized, and *data protection* aspects and enforcement are very important. All actions, decisions that fall within the scope of the psychiatric emergency should be in the best interest of the patient and should be thoroughly and accurately documented.

6. Psychological crisis, crisis intervention and suicidal behaviour

6.1. Psychological (emotional) crisis

Crisis intervention and the treatment of *patients with suicidal behaviour* are special areas of emergency psychiatry. A significant proportion of *suicidal acts*, which are not induced by mental disorders, but rather by psycho-social stressors cannot be adequately interpreted in the classical medical model, but in the *crisis paradigm*. The emotional crisis is always a suicidal crisis in those cultures and countries (e.g. Hungary), where the “solution” – in the form of suicide – for the hopeless situation is given by the socialization.
A *psychological/emotional crisis* is a perception or experience of an event or situation as an intolerable difficulty that exceeds the person’s current resources and coping mechanisms. It is an acute psychological condition, which may require immediate intervention, and which is resolved spontaneously or as a result of appropriate intervention within a limited time. However, it may become recurrent or chronic, and may result in various mental disorders (e.g. depression, psychosis, substance abuse or even self-destructive behaviour). Thus, a crisis cannot in itself be considered a definitive mental disorder, but the frequent occurrence or chronicity of a crisis may on the one hand highlight underlying psychiatric illness or personality disorder and on the other hand may result in psychopathological symptoms. Thus, the complex relationship between psychological crisis and psychiatric illnesses can be understood by using the circular model instead of linear causal thinking. In addition to emotional ambivalence in the crisis, there is increased ability to be influenced, which also means increased responsiveness to external help. Effective use of this suggestibility is important because adequate help (crisis intervention) provides a creative solution to the crisis and a chance for positive change through the reorganization of the personality at a higher level.
Theoretically, there are three main forms of psychological crises. *Erikson* introduced the so-called *developmental* (psychosocial, epigenetic) crises, which are inherent in the human psychosocial maturation process. The particularly vulnerable periods for developmental crises are the adolescent, mid-life, and elderly ages. *Caplan* introduced the concept of *incidental* crisis that occurs as a result of external stress, trauma, loss, or a negative, critical life event: "a short period of psychological imbalance in a person who has to deal with dangerous circumstances for which he or she poses a problem but is unable to avoid or solve it with his or her usual problem-solving tools and abilities”. The phenomenon of *crisis-matrix*, introduced by *Jacobson* means the interplay of these two types of crises, and thus being a particularly dangerous period for the development of suicidal behaviour.
The course of the psychological crisis has specific dynamics with many possibilities for assistance.

6.2. Crisis intervention

In the management of emotional and suicidal crisis, *crisis intervention* – which is in fact psychological first aid – may be an effective, life-saving method. By definition, *crisis intervention* is an immediate and time-limited (short-term) psychological care aimed at assisting individuals in order to solve crisis situation and restore equilibrium to their bio-psycho-social functioning and to minimize the potential of long-term psychological trauma. Thus, crisis intervention is usually a short, goal- and problem-oriented and focused treatment with psychotherapeutic elements, lasting a few days to some weeks, generally with 1-6 sessions. Medications (especially anxiolytics) can also be used in the treatment to relieve the distressing symptoms.
While its primary purpose is to save lives, it can also offer the opportunity to integrate the personality at a higher level (post-traumatic growth), relying on the promotional aspects of the crisis. Going beyond the solution of the current situation ("here and now"), it prepares the person in crisis to deal with similar situations in a more effective way in the future.
Recognition and primary care of a psychological crisis begins where the client first appears and asks for help. It can be a psychiatric caregiver, a psychotherapist or a family doctor, any medical supplier, a psychiatric unit or even a non-medical institution (paramedical, social or educational institution). Emergency hot-lines also have a key role, as well as churches, charities and other non-governmental organizations. Thus, besides psychiatrists or psychologists, crisis intervention may be carried out by other well-trained professionals, such as social workers, mental hygienists, hot-line helpers, pastors, teachers, or even police or fire department workers.
Referral to psychiatrist is usually needed when regression and constriction have not been resolved during primary care, the client is unable to develop or implement realistic plans on the short-term, and has direct suicidal thoughts. Following a suicide attempt, admission to a psychiatric ward may be required, especially if psychotic symptoms are present, if the attempt is violent or nearly fatal, if there is a continued suicidal ideation, if there is no adequate family or social support, or in case of underlying mental disorder, or if the client is agitated, restless, impulsive and refuses any help.
Beyond the classical crisis intervention, especially in the developed countries, the increasing number of natural disasters, accidents and violent or terrorist acts (as critical events) has necessitated the development of disaster-medicine with specially trained staff, who can provide immediate psychological support to the victims, playing an important role in preventing post-traumatic stress disorder.

6.3. Management of suicidal behaviour

Although suicide rates are decreasing in most countries, suicide is still a major health concern worldwide.
Acute suicidal behaviour requires urgent care, especially if emotional distress is not resolved during a crisis intervention approach. In these cases, acute psychiatric referral may be needed. In psychiatric emergency care, patients at risk of acute suicide deserves special attention. Because they are a highly heterogeneous group both in terms of method choice and underlying causes, accurate assessment of suicide risk is often not easy and involves a particular emotional burden on the helpers.
The acute care model consists of the following 6 major components.

1. Recognition of warning signs (communicative or behavioural)
If the behaviour or the communication of the patient implies that suicide is a possibility ('warning signs'), the most important task is to ask directly about self-destructive or suicidal thoughts, ideations, plans and current or past suicide attempts.
2. Exploration of crisis situation and/or psychopathologic symptoms and mental disorders

Some important warning signs, related to the actual mental state of the patient, could also influence recent suicide risk. Therefore, one should explore psychopathologic symptoms, particularly depressive and anxiety symptoms, Beck's cognitive triad (negative interpretation of the self, world and future), hopelessness, impulsivity and psychotic symptoms. If those are present, the treatment of the underlying depressive or psychotic disorder is always needed.
During the evaluation of crisis, one should also consider Erikson's psycho-social and Caplan's incidental crisis theories and look for the symptoms of Ringel's presuicidal syndrome. The 'Ringel's triad' consists of three major elements: constriction, inhibited aggression turned against the victim's self, and suicide fantasies. During exploration, one may also recognize the special communication and psychopathological features of the suicidal crisis. Besides denial, the "cry for help", the "cry of pain" and the "negative code" phenomena may include direct and indirect forms of help-seeking and hidden aspects of the suicidal crisis. Ambivalence is key-point, as most suicidal people in crisis "*don't want to die, but to live in a different way*". With respect to other psychopathological features, we refer to the phenomena of crisis regression, constriction, suggestibility, and various physical-vegetative accompanying symptoms.
3. Assessment of potential protective and risk factors
When assessing suicide risk, one should also consider the risk and protective factors. The major risk factors for completed suicide are previous suicide attempts and mental disorders. A number of studies demonstrated that approximately 90% of suicide completers had a mental disorder (especially depression) at the time of suicide, and that male gender is also a significant risk factor. Many other relevant demographic and clinical risk factors (elderly, adolescents, hopelessness, divorce, living alone, chronic medical illness, recent adverse event, family history of suicide) and lack of protective factors (stable social, interpersonal and family background, peripartum, religion, and good health) have been identified concerning suicidal behaviour.
4. Based on the above the estimation of imminent suicide risk
After assessing all of these symptoms and factors above one can estimate the risk of suicide, which could be low, medium, or high.
5. Planning of the intervention strategies
After the first meeting with the patient with potential suicidal behaviour, the minimal aim in primary care setting is to recognize the warning signs, to assess suicide risk (from the communication and behaviour of the patient, from the psychopathologic symptoms and from other risk and protective factors mentioned above), and make a plan for intervention strategies. The severity of suicide risk should determine the level of intervention.
6. Management of suicidal patients through different levels of interventions
The major task for low risk for suicide is to continue crisis intervention at the primary care provider level or propose crisis-intervention hot-line. Close follow-up is needed. For low or medium risk patients, a consultation is recommended with a specialist (a psychiatrist, or psychologist), who could be involved in further decisions and therapeutic processes, including admission to a crisis intervention centre, or a psychiatric out-patient service. If there are direct suicide gestures with suicide plans and obvious warning signs, especially when the crisis does not resolve, it is considered as a life-threatening condition with high risk for suicide, thus urgent psychiatric examination or acute admission to a psychiatric department is necessary.

In the management of suicidal behaviour, the *complex stress-diathesis model* has to be adjusted by considering biological markers (mental disorders, personality trait factors, psychopathologic symptoms) and psycho-social (crisis, negative life events, loss, isolation, interpersonal conflicts) factors. Only after the assessment of all these factors can professionals manage suicidal patients effectively by using adequate psychopharmacotherapeutic and psychotherapeutic interventions in the recognition, treatment and prevention of suicidal behaviour.