Psychiatric Emergencies

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Introduction

A psychiatric emergency is an acute disturbance of behaviour, thought or mood of a patient which if untreated may lead to harm, either to the individual or to others in the environment. Thus the definition of a psychiatric emergency differs from other medical emergencies in that the danger of harm to the society is also taken into account.

Emergencies may be classified as major, where there is a danger to life either of the patient or to others in his environment or minor where there is no threat to life but causes severe incapacitation. Only major emergencies will be discussed.

Suicide : Suicide rate in India was 11.2 per 100,000 in 2002. The rates vary across the country with states such as Kerala having the highest suicide rate of 30.8 per lakh in 2002. Suicide rates in Army, Air Force and Naval personnel were 0.04, 0.11 and 0.12 per thousand respectively. Rates are higher in urban than in rural settings. Studies of completed suicides show that 90-94% of the patients are mentally ill while committing the act. Depression accounts for nearly half the number of patients committing suicide followed by alcohol abuse (34%) and schizophrenia (13%) [1]. A meta-analysis of 249 studies on suicide during 1966-93 revealed that virtually all mental disorders carry an increased risk of suicide barring mental retardation and dementia. The suicide risk is highest for primary psychiatric disorder and least for organic disorders with substance use disorders falling in between [2]. Indian studies show that most people attempting suicide are in the age group of 15-30 years and are predicted to increase further in the coming years [3,4]. Suicide is common in the unmarried (in the married the loss of spouse increases the risk during the first year of the loss). Rates are also high in the unemployed and in those suffering from a concurrent medical illness. More men than women commit suicide though more women attempt it. Psychosocial factors that predispose to suicide, include,

chaotic home environment, sudden loss (death, divorce, job, finances), recent humiliating life event, unfaithful partner, HIV and legal problems. In the young, suicides are common after declaration of the results of the board exams. The most common symptom in patients is hopelessness i.e. the belief that no action can save the patient from the trauma that he or she may be undergoing. A majority (56%) attempt suicide as an escape from an unbearable situation, 13% do so to produce a change in others or the environment and the rest have a combination of escape and manipulative motives. 50 to 80% of suicide attempters have communicated their intent to the family or to their treating psychiatrist.

Management : All psychiatric patients need to be asked about suicidal ideation as a part of routine assessment. Self destructive behaviours and previous attempts are the most powerful predictors of a future suicidal attempt. It needs to be clearly understood that asking about suicidal attempt does not provoke the patient to commit suicide or instil the idea of committing suicide. Many patients feel relieved on being asked about suicidal ideation and being explained that their ideas are part of an illness.

In case the patient has arrived in the emergency department with history of an attempt, then, first the medical condition of the patient needs to be assessed for risk to life and admitted to the ICU under escort until the medical condition stabilizes. At the earliest opportunity he is referred for assessment by a psychiatrist.

Severely suicidal patients who are depressed need to be treated with electro-convulsive therapy (ECT). The procedure has an overall response rate of 75-85% [5]. In Schizophrenia, apart from ECT, atypical antipsychotics such as clozapine are reported to be having a specific antidepressant and anti-suicidal effect.

Crisis intervention centres and helplines are available in most cities all over the world. They provide an avenue

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for the person contemplating suicide to ventilate his problems and enable the counsellor to persuade the patient to seek professional help. However, a scientific validity of their usefulness is still lacking.

Table 1**Psychiatric emergencies**

Major emergencies	Minor emergencies
Suicidal patients	Grief reaction
Agitated and violent patients	Rape
	Disaster
Medical emergencies in psychiatry	Panic attack
Deliriums due to life threatening conditions	
Neuroleptic malignant syndrome	
Serotonin syndrome	
Overdosages of common psychiatric medications	
Overdosages and withdrawal from addicting substances	

Agitated and violent patients : Violence is a danger often faced in the emergency room setting. The risk of violence is especially high in those societies where there is easier access to firearms and alcohol/drug abuse. The use of alcohol also predisposes to violence. Specific psychiatric and medical disorders have also been associated with violent behaviour (Tables 2 & 3).

Certain characteristics predict an assault in the emergency setting. Unemployed young (< 40 years) men, with low socioeconomic status, past history of violence and who are usually non compliant with treatment. A threat to assault should always be taken seriously. Signs predicting an impending assault are anger, demanding immediate attention, loud voice, excitement, staring eyes, flared nostrils, flushed face, hands clenched or gripping, pacing about in the room, possessing weapons, pushing furniture, uncooperativeness and suspiciousness, slamming objects and sudden movements.

Protection against assault : Strategies recommended for protection against an assault are shown in Table 3.

Drugs used for controlling aggression Non-specific sedation may be required to first bring the patient under control before an assessment can be made. Emergency staff should be familiar with the administration of these drugs which should readily be available. If the patient is willing, drugs may be given orally, however, usually the parenteral route is necessary. The most commonly used drug is haloperidol 10 mg given as a single intramuscular dose and can be safely repeated at intervals of every half hour to a maximum of 60 mg. Lorazepam 2 mg up to a maximum of 10 mg is equally effective as haloperidol. It is especially useful where alcohol withdrawal is suspected.

Table 2**Psychiatric disorders associated with violent behaviour**

Schizophrenia especially paranoid
Mania
Paranoid psychosis
Personality disorder especially antisocial type
Alcohol intoxication or withdrawal
Substance intoxication with cocaine, amphetamines, anabolic steroids, phencyclidine
Substance withdrawal
Post traumatic stress disorder
Dementia
Learning disorder

Table 3**Medical disorders associated with violent behaviour****Neurologic illnesses**

Brain infections such as encephalitis, meningo encephalitis
Head injury with intracerebral, subarachnoid or subdural haematoma
Cerebral infarction
Seizure disorders (interictal, post ictal or temporal lobe epilepsy)
Hepatic encephalopathy
Huntington's disease
Parkinson's disease due to levodopa toxicity
Wilson's disease

Endocrinopathies

Thyrotoxicosis
Hypothyroidism
Cushing's syndrome
Hyper parathyroidism

Metabolic disorders

Hypoglycemia
Hypoxia
Electrolyte imbalance
Hypocholesterolemia

Infections

AIDS
Syphilis
Tuberculosis

Vitamin deficiencies

Folic acid
Niacin
Pyridoxine
Vitamin B 12

Temperature disturbances

Hyperthermia
Hyhpothemia

Once the patient is under control, it is mandatory to carry out a careful physical examination and laboratory studies to exclude the common causes of violent behaviour enumerated earlier. Often, if the patient is accompanied by relatives or friends, the diagnosis may be revealed by history.

Prevention of assault on health workers : The

casualty centre should have adequate security staff. Access to examination rooms and treatment areas should be limited. All consulting and examination rooms should have at least two exits. Similarly all rooms should have a call button, which can be pressed in an emergency so that all available staff can rush to the aid of the medical person being assaulted. All suspicious patients should be watched and reported in detail for future risks.

Medical personnel should also be careful not to provoke an assault by being always polite and respectful, calm, avoiding prolonged eye contact with potentially violent patients, giving clear instructions, remaining at a safe distance unless unavoidable, keeping clear exits, removing all articles in their rooms which could be used for assault. All cases of assault must be investigated and discussed among the staff and the administration and lessons drawn for future [6].

Delirium is managed with environmental manipulation to help orient the patient (eg. leaving a light on at night, frequent orientation to time, place, and person) and with drugs. Drugs should be prescribed only after the underlying disorder has been diagnosed or the process of determining the diagnosis has been initiated. Haloperidol in low doses (0.5 to 2 mg) is frequently the drug of choice. Lorazepam 0.5 to 2 mg can reduce agitation and is preferable when substance withdrawal is the cause. Anticholinergic drugs (eg, benztrapine) should be used with caution in delirious patients, especially the elderly, because anticholinergic toxicity (atropine psychosis) can occur.

Substance intoxication and withdrawal : It may occur with a psychiatric disorder or as a primary presenting complaint. Alcohol, cocaine and phencyclidine are the substances that most commonly lead to violent behaviour. Patients should be placed under observation in a secure room away from stimulation; attempting to talk the patient down is not recommended. Physical restraints or sedation may be necessary for violent patients. Lorazepam 2 to 4 mg stat or diazepam 10 to 20 mg stat is recommended to treat agitation.

Withdrawal from barbiturates, other sedatives and hypnotics (including benzodiazepines) and alcohol are similar clinically. When symptoms are severe, treatment in a hospital is safest and is mandatory if the patient is febrile ($>38.3^{\circ}\text{C}$ or 101°F), cannot hold down fluids to prevent dehydration, or has a severe underlying physical disorder. Alcohol withdrawal can be life threatening. Seizures can occur.

Delirium tremens, a withdrawal syndrome that starts within 7 days of withdrawal (usually within 24 to 72 h), is a medical emergency and should be treated in an ICU. Management is usually with high doses of

benzodiazepines, parenteral thiamine and maintenance of fluid and electrolyte balance.

Overdose of prescribed psychoactive drugs : It can also pose a threat to life apart from causing intoxication. Hence, the patient should be jointly managed by a physician and a psychiatrist. If the patient has taken a toxic dose and is awake, treatment consists of inducing emesis followed by administering activated charcoal. Overdose with tricyclic antidepressants or carbamazepine requires cardiac monitoring. Overdose with barbiturates or benzodiazepines and alcohol may cause respiratory arrest. Antipsychotic drugs, at therapeutic as well as toxic doses, can cause acute extrapyramidal adverse effects including dystonia, oculogyric crisis, torticollis, and akinesia. Akathisia is a common adverse effect of high-potency antipsychotics, when severe, it is accompanied by extreme anxiety or terror. Acute onset of oculogyric or orofacial dystonia in an otherwise healthy person may suggest purposeful or inadvertent ingestion of an antipsychotic. Immediate relief may be provided with a parenteral antihistaminic such as promethazine 25 mg IM.

Neuroleptic malignant syndrome : It is a hypermetabolic reaction to dopamine antagonists, primarily antipsychotic drugs, such as phenothiazines and butyrophenones. It usually occurs early in treatment and rarely during maintenance treatment. It develops in up to 3% of patients started on antipsychotics. Risk is increased in agitated male patients who have received large and rapidly increased doses. No genetic component is apparent. Its pathophysiologic basis is believed to be blockade of central dopamine receptors. Characteristic signs are muscle rigidity, hyperpyrexia, tachycardia, hypertension, tachypnea, change in mental status and autonomic dysfunction. Laboratory abnormalities include respiratory and metabolic acidosis, myoglobinuria, elevated CK and leucocytosis. Mortality rates are between 10 to 20%.

Treatment includes cessation of antipsychotic drugs, supportive care, and aggressive treatment of myoglobinuria, fever, and acidosis. The dopamine agonist bromocriptine 2.5 to 20 mg tid or dantrolene up to 10 mg/kg IV q 4 h may be used as a muscle relaxant. Treatment is usually in an ICU. After recovery, reintroduction of the antipsychotic drug retriggeres the syndrome in up to 1/3 of patients.

Serotonin syndrome : It occurs when serotonergic agents are used in combination with MAOI inhibitors. A sudden build up of serotonin systemically may lead to a life threatening condition manifesting in hyperthermia, diaphoresis, excitement or confusion, hyperreflexia, hypotension, tremor. The condition may progress to DIC, rhabdomyolysis and cardiovascular collapse. Urgent

medical management is necessary. Drugs like dantrolene, a potent muscle relaxant and periactin, which is also a serotonin antagonist are useful.

Table 4

Strategies to prevent assault

Verbal assault

Answer all questions softly, simply and honestly
Be empathic and calm
Keep hands visible
Keep the door open
Stay at least an arm's length away from the patient
Stay to the side of the patient
Use non threatening body language
Use reflective statements rather than judgmental ones

Physical assault

Call for help, if possible press the panic button to summon help
Deflect a kick with your legs
Deflect punches with your hands
Escape
Face the person sideways
If bitten do not pull away the bitten part, instead force the bitten part to the mouth and nose of the biter to block his respiration
If choked, tuck your chin to the chest to maintain the airway
If the patient grabs your hair, use your hands to control the hands of the patient

Conclusion

The increasing incidence of alcohol and substance abuse in our country as well as the rise in levels of unipolar depression, have led to an increased number of patients reporting to the emergency care unit. It is necessary for all clinicians to be familiar with common psychiatric emergencies especially suicide attempts and violent behaviour and other psychiatric emergencies so as to improve the level of care offered to the patients.

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