

Psychosis

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Introduction

Psychosis is defined as a major mental disorder of organic or emotional origin in which a person's ability to think, respond emotionally, remember, communicate, interpret reality, and behave appropriately is sufficiently impaired so as to interfere grossly with their capacity to meet the ordinary demands of life.¹ Patients with psychosis present with hallucinations, delusions, disturbance in mood and thought disorder. Psychotic disorders are not uncommon with various epidemiological studies showing that between 0.5-1% of the population suffer from a psychotic disorder at any one time.² It is important to diagnose and treat psychotic disorders because they can be frightening for the patient and their relatives as well as leading to considerable disability and suicide. The National Survey of Mental Health and Wellbeing (1999) found that between 4-7 persons per 1000 adults resident in urban areas are in contact with mental health services during any given month because of symptoms of a psychotic disorder. The lifetime prevalence of schizophrenia is about 1%.

Between 5-15% of patients suffering from a psychosis will commit suicide.³ Patients with psychosis have greater mortality and morbidity. Finally, psychosis is associated with significant disability with regard to social and occupational functioning. There is evidence that delays in the detection and treatment of psychotic conditions can lead to reduced responsiveness to treatment and more severe residual symptoms.⁴

Psychosis is not a condition itself but rather a final common pathway for a number of different conditions that include organic or physical conditions, drug and alcohol abuse, mood disorders and schizophreniform disorders.

Diagnosis

One needs to consider the possibility of a psychotic illness in anyone who is experiencing a change in behaviour. Psychosis can occur at any age but is most common in late adolescence and early adulthood. It is becoming more apparent that health practitioners need to be watchful for early signs or symptoms of psychosis. These are signs and symptoms that are not specific; in other words they can occur in any number of conditions. However, they are often seen in the early phase of the condition and early diagnosis relies on picking up these features. This allows the practitioner to institute early treatment for psychotic conditions, which has been shown to reduce the morbidity associated with psychotic illness.^{5,6}

Prodromal symptoms of psychosis

- Suspiciousness
- Depression
- Anxiety
- Irritability
- Restlessness
- Change in appetite
- Sense of alteration of self, others or the outside world

- Social isolation or withdrawal
- Marked impairment in role functioning
- Markedly peculiar behaviour
- Marked impairment in personal hygiene
- Blunted, flat or inappropriate affect
- Digressive, vague or metaphoric speech
- Odd or bizarre ideation
- Unusual perceptual experiences
- Marked lack of initiative, interests or energy.

Many of these symptoms are non-specific, but incipient psychosis is suggested by:

- Marked, unexplained and consistent changes in behaviour
- A pattern of increasing severity
- Clustering of symptoms
- Family history of psychosis

More specific features of psychosis can then be looked for. These include:

- Hallucinations. These are seeing, hearing or otherwise experiencing things that are not really there. Hallucinations can occur in any modality, but in schizophrenia they characteristically involve auditory hallucinations, whilst in organic states visual hallucinations can occur.
- Disturbance in mood or feelings. This can involve depression or sadness or expressing feelings that are out of context with what the patient is saying, such as laughter when talking about someone hurting them.
- Thought disorder. In which the normal flow of thoughts is disrupted; this may be mild, in which case the patient seems vague and difficult to understand, to severe in which the patient's speech is garbled and incoherent.
- Disturbance in behaviour. The patient may be mute and immobile (catatonic) or may display other behavioural abnormalities, such as rocking to and fro, or making unusual gestures such as hand movements.
- Delusions are false beliefs, such as that people want to hurt the patient or that the patient has special powers or that the patient is being controlled in some way.
- Withdrawal. Seen as not wanting to mix with people the patient previously was mixing with, and not taking interest in things and not looking after themselves as much.

When called to a patient with a possible psychotic illness it is imperative to initially assess the safety of the patient and of the health practitioner. Psychotic patients can act irrationally because of delusions or hallucinations. One should approach such patients in a calm manner explaining that you have been asked to see them because people have been worried about their health, and then explain that you would like to talk to them about this. Sometimes it helps to examine a psychotic patient with another health worker. One should not be confrontational. One should attempt to create a calm and safe environment of low stimulation for these patients.

If the patient is in danger of harming themselves or is threatening then it is important to contact someone else. This may be the police or a family member or community elder.

The first step in assessment is to determine whether there is a physical cause for the psychosis. This is done on the basis of the mental status examination.

Individual mental state assessment

Appearance: Simply describe the patient's physical presentation: clothing, hygiene and cultural appropriateness.

Behaviour: Briefly describe the patient's behavioural style, including agitation, retardation, and any inappropriate or unusual behaviour.

Conversation: Describe both the content of conversation, perhaps with some quotes, as well as the form, which includes the rate of conversation, as well as the logic, or otherwise, of thought processes.

Affect and mood: Note the individual's mood level, variability, range, intensity and appropriateness.

Perceptual abnormalities: Note any psychotic symptoms or other perceptual abnormalities, including hallucinations and delusions. These perceptual abnormalities can occur in any of the five senses.

Cognition: Describe orientation, memory and attention, or ability to concentrate. The 'Mini Mental State Examination' is an excellent brief cognitive assessment that can be performed by most clinicians in three to five minutes.

Dangerousness: Comment on any suicidal or homicidal ideas, beliefs or feelings.

Insight: Assess the patient's insight into his or her condition. This may be hard to judge, but is particularly important because of the management implications of poor treatment compliance.

Judgement: Assess the patient's level of judgement, in particular regarding safety issues.

Rapport: Briefly comment on how you believe the interaction was between yourself and the patient, and in particular how the patient made you feel.

Certain features of the mental state suggest an organic cause. Fluctuating levels of consciousness and impairment in concentration, attention and memory indicate a need to rule out physical causes. Physical features, such as abnormal vital signs—including fever and tachycardia, flushed appearance, rapid breathing and recent head injury – would likewise indicate a need to explore for organic causes for the psychosis.

If one suspects a physical cause for the psychosis one would need to differentiate between:

1. Psychosis due to a medical condition
2. Psychosis due to alcohol and other drugs, such as inhalation of petrol fumes
3. Psychosis due to withdrawal from drugs
4. Psychosis due to degenerative condition such as Alzheimer's disease.

What to do

- When a patient with psychosis is referred to you obtain as much information from any relatives or carers as possible
- When you are ready to assess the patient go with someone
- Sit with the patient in a quiet and calm environment. It may be important to be in surroundings that are familiar to the patient. What we are trying to do is to reduce the level of anxiety or fear in the patient
- Ask how the patient is feeling. Ask the patient what he thinks is going on
- Ask also about suicidal feelings or ideas. If the patient says they have been having suicidal ideas or feelings it is important to assess this further
 - Ask about what plans the patient has had about suicide
 - Ask about how close the patient has come to carrying out any plan
 - Ask about feelings of hopelessness: this is associated with increased risk of suicide
 - Ask about previous attempts: again, this is associated with increased risk
- Initially ask open-ended questions in an effort to obtain as much information about the patient's experience as you can. Then ask questions about specific features of psychosis

- Have you ever felt that people were talking about you behind your back?
 - Have you ever heard people talking and then looked around and there was no-one there?
 - Have you ever had experiences that you found hard to make sense of or understand?
 - Have you ever found it hard to follow your train of thought?
- Ask about whether they have ever had any mental illness before. If they have, ask about the symptoms and how it was treated. Ask about medications and whether they have stopped taking medication that they should still be on
 - Ask if they know of anyone in the family who has had trouble with mental illness
 - Ask if they drink and how much
 - Ask if they use drugs or sniff petrol: ask how often and for how long
 - Do a mental status examination and record your findings
 - If possible do a physical examination: check especially for pallor, breathlessness, fever and sweats, high or low pulse, high or low blood pressure, pupil changes and neck stiffness, head injury, abnormal movements, weakness and paralysis
 - Blood tests should be arranged for electrolytes, creatinine, liver function tests, thyroid function tests and full blood count and ESR, and STS
 - Institute a treatment plan or discuss the treatment plan with a medical practitioner or mental health worker. (Check with local health centres or hospitals for details of these contacts)

Treatment ^{7,8}

The first thing to decide is where to treat the patient. Patients should be treated in the least restrictive setting that is safe for them and allows for effective treatment. If the patient is a danger to themselves or others, or unable to look after themselves and have no family or friends to look after them, or if there are underlying medical conditions that require inpatient treatment, then hospitalisation should be seriously considered.

Involuntary treatment: referral and sedation authorisation

If the patient is a danger to themselves or others and is not willing to accept treatment then the provisions of Sections 34 and 35 of the NT Mental Health and Related Services Act 1998 may need to be invoked to provide for involuntary treatment. In the NT all doctors, health professionals (including ambulance officers who have had the specific training), and police can do this. Psychiatrists and District Medical Officers can invoke these provisions over the phone. A Section 34 or Section 35 of the MHARS cannot be authorized by a member of the police force. This is described in more detail in the Psychiatric Emergencies Legal Advice chapter.

Involuntary treatment: restraint

Some patients may need to be restrained to prevent them being a danger to themselves or others. If this becomes necessary then one person should be coordinating the procedure. There should be one person assigned to each limb and one person assigned to the head. The idea is that at the appropriate time the restraint team approaches the patient calmly but firmly, grabbing the assigned part of the body and placing the patient prone.

Some patients with psychosis can be treated with supportive care alone. This involves being with someone who can ensure that the patient is safe, and eats and drinks appropriately. This is particularly the case with psychosis due to drug and alcohol intoxication or withdrawal.

Where the psychosis is due to an underlying medical condition then this will need to be treated. However, where symptoms do not resolve with supportive or medical treatment specific treatment for the psychosis is required. This will depend on the severity of the psychosis and the agitation of the person.

In all levels of agitation oral medication should be tried first, and the intramuscular route used if this is not practical or fails. Intravenous use of sedation and antipsychotics is not recommended because of the danger of respiratory suppression and the difficulties of getting intravenous access in agitated people.

(A relatively simple protocol for sedation of agitated/psychotic people is given in the CARPA STM protocols.)

Remember that sedation is dangerous. Be prepared to manage the person's airway and ventilation. Don't give benzodiazepines to children and give old people lower doses.

Risperidone is preferred as the oral antipsychotic because it is less likely to cause extrapyramidal side effects, such as muscle stiffness and spasms (appendix A antipsychotic side effects). Similarly, droperidol is the intramuscular choice as it is a low potency antipsychotic. Thus it is less likely to cause acute dystonic reactions and, having the advantage of causing less respiratory depression, it does not need benztropine as well.^{9,10,11}

When sedation is achieved establish an IV line to maintain hydration and to permit IV medication access if later required by the medical officer. If the patient has been drinking heavily then intramuscular Thiamine 100 mg is required to prevent Wernicke's encephalopathy and lactic acidosis.

In the long term treatment will be determined by the underlying cause of the psychosis. Treatment will usually involve a combination of medication and psychological and social treatments.

Medications

Patients with psychotic conditions will usually require long-term treatment with either antipsychotic medications or mood stabilisers. Where the patient is suffering from a schizophreniform illness or delusional disorder antipsychotic medication is indicated. It is best to use one of the newer antipsychotic medications because of the better side effect profile compared to the older antipsychotic medications. In particular the newer antipsychotic medications produce less extrapyramidal side effects and there is less likelihood of tardive dyskinesia, which is a long-term side effect characterised by abnormal movements, particularly around the mouth. The newer antipsychotic medications and their dosages are:

- Risperidone 2-6 mg per day
- Olanzapine 5-20 mg per day
- Quetiapine 150-400 mg per day
- Clozapine 100-400 mg per day

Clozapine is only approved for treatment of psychotic conditions where the patient has been resistant to treatment with two other anti-psychotic medications. This is because it has been associated with agranulocytosis, which in some cases has been fatal. For this reason patients need regular blood monitoring and need to be alert for symptoms and signs of agranulocytosis such as fever, sore throat and ulcers.

Where compliance with oral medication is a problem depot medications can be helpful. There are three more commonly used depot medications:

- Flupenthixol decanoate, 20-40 mg IMI fortnightly
- Zuclopenthixol decanoate, 200-400 mg IMI fortnightly
- Haloperidol decanoate, 50-150 mg IMI monthly

Mood stabilisers are used for the treatment of bipolar affective disorder and can also be used to augment the effectiveness of the antipsychotic medications in the schizophreniform disorders. There are three mood stabilizers:

- Lithium, 250-1000 mg per day (however lithium can be difficult to manage when the person is mobile and/or not feasible to regularly monitor blood levels)
- Sodium evaporate, 500-1500 mg per day (blood levels required regularly)
- Carbamazepine, 200-800 mg per day

The older antipsychotic medications can still be useful, especially where patients do not tolerate the newer medications or find them ineffective.

Psychological treatments

Psychotic conditions can produce problems with motivation and impairment in social functioning. These are best dealt with by psychological methods. Most patients with chronic psychotic conditions should be seen on a regular basis by a mental health worker, doctor or community nurse. The purpose of this is to:

- Build a rapport so that the patient can begin the process of trusting those people in the health system who can best help him
- Monitor the mental state and the effectiveness of treatment (this will also require an assessment of compliance)
- Provide education about the nature of the condition and of how treatment works so as to enhance compliance
- Monitor for side effects and deal with them (this is especially important for enhancing compliance)
- Help deal with issues of shame and ostracism about having a mental illness
- Encouragement to re-engage in usual activities
- Support to deal with drug and alcohol abuse.

The family of the patient may also need education and support. This should be directed at helping them understand the nature of the illness and how to deal with the behavioural problems associated with it.

Medical follow-up

Mental health clients have the same incidence rate of other health problems, i.e. diabetes, hypertension, sexual health, as the rest of the population, but often their behavioural and psychological concerns take prominence and other health issues are not followed up.¹² Mental health clients are also frequently on medications that require regular blood tests and monitoring of side effects.

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