Psychosis - Diagnosis and Management

Psychosis is a severe mental disorder in which there is extreme impairment of ability to think clearly, respond with appropriate emotion, communicate effectively, understand reality and behave appropriately.

Psychosis occurs in a number of serious mental illnesses and not just schizophrenia - eg, depression, bipolar disorder (manic-depressive illness), puerperal psychosis and sometimes with drug and alcohol abuse. It can also occur in a number of neurological conditions and with drugs not associated with abuse.\[1\]

Psychosis interferes with the ability to function and can be very debilitating. Disabling symptoms include delusions and hallucinations:

- A delusion is a false, fixed, strange, or irrational belief that is firmly held. The belief is not normally accepted by other members of the same culture or group. It is important to look at culture, especially with ethnic issues, to decide if strange beliefs are really psychotic. There are delusions of paranoia (plots against them), delusions of grandeur (exaggerated ideas of importance or identity) and somatic delusions (false belief in having a terminal illness).
- An hallucination is sensory perception (seeing, hearing, feeling, smelling) without an appropriate stimulus, like hearing voices when no one is talking. Not all hallucination suggests psychosis.

See separate Delusions and Hallucinations article.

Epidemiology

- 80% of patients present between the ages of 16-30.\[2\]
- A study of young people (aged 17-35) requiring treatment for first-episode psychosis, from an early intervention service in Cambridgeshire UK, estimated a crude incidence of 50 per 100,000 person-years. This was far higher than one might expect from an urban/semi-rural area.\[3\] A similar incidence was found in a rural community in East Anglia and was twice as frequent in men as in women.\[4\]
- A Welsh study found a higher incidence of psychosis in urban dwellers than in those living in rural communities.\[5\]
- Women tend to present at a slightly older age than men and they are more susceptible at certain times, such as when premenstrual and during the puerperium and the menopause.\[6\]
- UK studies suggest a higher prevalence of psychosis in the black and minority ethnic (BME) rather than white population. The evidence suggests that strong ethnic identity in BME individuals and perceived disadvantage were contributing factors.\[7\]

Presentation\[2, 8\]

Symptoms vary according to the condition but the doctor of first contact will need to address the following general issues:

- The patient is often brought to the doctor by a third party. This might be because the patient lacks insight but, more likely, because psychosis is a very distressing condition, both for the patient and for those around and a degree of support is required.
- Occasionally, the first contact may be with family members who have concerns about a member of their family. If the patient cannot be persuaded to come to the surgery, a home visit may be necessary.
- Where the patient may behave aggressively, consider a joint visit with an experienced community psychiatric nurse and/or the police.

Question the patient directly to discover the symptoms and to ascertain the degree of insight. The accompanying person may be extremely valuable in terms of giving history.

Follow the guidance for psychiatric assessment but history should cover the following ground (the accompanying person may be a very valuable source of information):

- What is the nature of the hallucination or delusion?
- What is the time span?
- Is there a recurring theme?
- Is there insight into it being unreal?
- Have there been any recent major life events?
- Is there a history of substance abuse (alcohol or drugs)?
- Does the patient's past behaviour suggest psychological vulnerability - eg, irritability, uneasiness, suspiciousness and withdrawn mood?
- Is there a family history of mental illness?
Whilst taking the history it is possible to make an assessment of the patient’s mental state:

- Is there loss of touch with reality; are there delusions or a bewildered mood?
- Is thought or speech disorganised, abstract or vague?
- Is emotion normal and appropriate? Remember that such experiences will naturally cause extreme anxiety but are there inappropriate emotional outbursts?
- Is there excitement or confusion?
- Is there depression or suicidal ideation? Depression can cause psychosis and all forms of mental illness have a risk of suicide, not just depression. There are a number of forms of self-harm assessment.

Physical examination is unlikely to be rewarding in the younger patient but, in the older one, there may be physical signs of alcohol abuse, neurological features and/or other signs of systemic disease. Always look for evidence of poor personal hygiene or self-neglect.

For more information on the presentation of psychosis, see the separate articles listed under ‘Differential diagnosis’, below.

Investigations

Psychosis will usually require referral to mental health services but there are some investigations that can be undertaken in the practice. The management of schizophrenia in primary care is well established but most doctors will want a specialist opinion at the outset.

- Abnormal LFTs and macrocytosis on FBC are highly suggestive of alcohol abuse. [9]
- Serological tests for syphilis should not be forgotten. [10]
- Screening for AIDS should be preceded by counselling.
- Urine screen for drugs of abuse. Light recreational use of cannabis can produce a positive test for the subsequent fortnight. Heavy and chronic use can produce a positive result for months after the last use. [11]
- CT brain scan may be contributory (eg, to exclude a space-occupying lesion or cerebral atrophy) if focal signs are present but not otherwise. [12]

Differential diagnosis

The history should help to distinguish between schizophrenia, bipolar disorder and depression; history, however, can be misleading.

Management [8]

It is very important to recognise and manage a first episode of psychosis correctly, as delay in diagnosis may adversely affect ultimate prognosis. [13] If there is an external cause like substance abuse this must be addressed. Remember that psychosis in substance abuse can be part of dual diagnosis. [11] Family intervention is an evidence-based support programme available in many areas which helps to reduce the relapse rate of psychotic patients in both early and late stages. [14, 15]

One study suggests that the needs of prisoners with psychosis are not well served in the UK and further work is needed. [16]

The National Institute for Health and Care Excellence (NICE) emphasises the need to treat all patients who have psychosis with respect throughout the whole care plan, including the experience of compulsory hospitalisation where necessary. [17]

**Aims of treatment** [2, 18]

- Reduce time between appearance of symptoms and initiating therapy (ie duration of untreated psychosis).
- Accelerate remission and prevent relapse.
- Use both biological and psychological measures.
- Maximise the patient’s ability to get back to normal life.

**Prompt assessment**

Admission to a psychiatric unit is often required at the outset. Compulsory admission and possibly enforced treatment under the Mental Health Act may be required. The condition is so distressing that some patients may go voluntarily. The family also tends to prefer the patient to be in a safe environment. See separate Compulsory Hospitalisation article.

This article is intended to cover the initial management of a first episode of psychosis. The GP’s role will primarily be to make a presumptive diagnosis and arrange secondary care assessment. Occasionally the patient’s behaviour will be such that it presents a threat to personal safety or the safety of others. In such circumstances the GP may be required to provide rapid tranquilisation.

**Schizophrenia**

First-line treatment in suspected schizophrenia now involves the use of the newer atypical antipsychotics - eg, risperidone or olanzapine is first-line but haloperidol is still used. NICE recommends that GPs should only prescribe such drugs if they are on familiar territory. [18] Otherwise, close communication with mental health services is required. See also separate Schizophrenia article.
Mania and hypomania
Drugs used include atypical antipsychotics, benzodiazepines - to aid sleep or reduce agitation - and mood stabilisers such as lithium and carbamazepine (usually under specialist supervision).

Depression
Psychosis in depression is usually part of the spectrum of bipolar disorder. See also separate Bipolar Disorder article.

Prognosis
The outlook in patients with psychosis is not as bleak as it once was, due to the policy of early intervention and improvements in drug treatment. However, it must not be forgotten that psychosis can lead to disastrous consequences. Suicide can occur in any form of mental illness, although its incidence in psychotic disorders is not as high as was once thought. One study of 2,132 patients reported that suicide occurred in 51 patients. Risk factors appeared to be male gender, cumulative effect of symptoms early in the disease and possibly early manic symptoms.[19]

One study found that factors which determined five-year prognosis after a first episode of psychosis included Global Assessment of Functioning (GAF) score during the year before first admission, education level, actual GAF score at first admission, gender and social network.[20] Another found that 20% of patients were in symptomatic and functional remission within two years.[21] A further study confirmed the importance of education to develop insight as a factor linked to improved prognosis.[22]

Psychosis appears to deteriorate rapidly in the early stages before reaching a level of stability. Any effective early intervention is therefore likely to improve the long-term prognosis.[23]

Further reading & references
- Bipolar disorder - the assessment and management of bipolar disorder in adults children and young people in primary and secondary care; NICE Clinical Guideline (Sept 2014, updated 2016)
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- GP Guidance: Emerging Psychiatry & Young People - What You Need to Know; Forum for Mental Health in Primary Care
- Ratnakar T; When Should a GP Refer Patients with Psychosis to Secondary Care? Cutting Edge Psychiatry in Practice, 2011
- Psychosis with coexisting substance misuse; NICE Clinical Guideline (March 2011)
- Buckley PE, Evans D; First-episode schizophrenia. A window of opportunity for optimizing care and outcomes. Postgrad Med. 2006 Sep;Spec No:5-19.
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- Psychiatry and schizophrenia in adults: treatment and management; NICE Clinical Guideline (Feb 2014)

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