Primary care approach to first-episode psychosis

Opening Vignette

Agnes, a 21-year-old university student, presented with a 3-day history of suspiciousness of an alien invasion and hearing voices talking to her when alone. Her family reported that she had been stressed over her final-year project submission and had difficulty sleeping a week earlier. She subsequently stopped attending classes and refused to leave her bedroom. She sealed the door and windows with duct tape, as she claimed that she needed to prevent poisonous fumes from entering the room. Her concerned parents brought her to your clinic to seek treatment for her stress.

WHAT IS PSYCHOSIS?

Psychosis is a condition whereby a person's thoughts and perceptions are not in keeping with reality. Patients with psychosis may experience an acute onset of perceptual disturbances, delusions, and disorganised speech and behaviour. Some may have an atypical presentation with attenuated or subthreshold symptoms.[1] In those with a short and acute onset of illness, longitudinal follow-up is required to establish a definitive diagnosis. When the psychotic symptoms result in a disturbance of function at school or work, interpersonal relations or self-care, it is regarded as a psychotic disorder. Approximately 10% of patients with first-episode psychosis (FEP) will eventually be classified as having a brief psychotic disorder (episode lasting less than 1 month with eventual full return to functioning). Patients whose illness lasts for 1–6 months are classified as having schizophreniform disorder, while those who have symptoms or dysfunction persisting beyond 6 months are diagnosed with schizophrenia [Table 1].[2]

HOW RELEVANT IS THIS TO MY PRACTICE?

Psychotic disorders typically present in adolescence and early adulthood.[3] The incidence of new cases of psychosis is estimated to be approximately 50 in 100,000.[4] Many young adults who present with FEP do not have previous contact with a medical professional until their index diagnosis of psychosis at a tertiary hospital. While 30% of these patients never experience a relapse, the rest may be at risk of a long-term illness.[5] Patients with early psychosis may initially manifest nonspecific odd behaviours and impaired social functioning, which may not prompt a psychiatric consultation. Notably, young patients with attenuated symptoms of psychosis have a 25% probability of developing a psychotic disorder over 3 years.[1]

Duration of untreated psychosis (DUP) refers to the time from manifestation of the first psychotic symptom to initiation of adequate antipsychotic drug treatment. A significant proportion of patients who receive timely treatment (short DUP) respond well and make good recovery. Conversely, delayed assessment and treatment (longer DUP) is associated with poorer clinical outcomes, including slower and incomplete recovery, more frequent episodes of relapse, increased frequency and length of inpatient treatment, poorer overall functioning and decreased quality of life.[6] Stigma in accessing specialist mental health services has been associated with longer DUP.[7]

In Singapore, stigma remains a major barrier to seeking treatment and remaining under the care of a mental health professional in patients with symptoms of psychosis. Families may perceive the abnormal behaviour exhibited by the psychotic patient as shameful or embarrassing to the family, and thus may choose to hide or disguise the mental illness as a face-saving measure.[8] Cultural perceptions of behavioural changes related to mental illness may mislead some families to seek assistance from traditional spiritual healers due to poor mental health literacy. They may also try to manage the psychosis at home, until the patient's condition deteriorates drastically and warrants hospitalisation.[6]

Table 1: Differential diagnoses of first-episode psychosis.

Characteristic	Brief psychotic disorder	Schizophreniform disorder	Schizophrenia	Schizoaffective disorder	Bipolar affective disorder
Onset	Acute		Chronic	Chronic	Associated with mood symptoms
Duration	1 day to <1 month	1–<6 months	>6 months	>6 months of symptoms of schizophrenia	>7 days of mania
Symptoms	Delusions, hallucinations, disorganised speech, grossly disorganised or catatonic behaviour	Delusions, hallucinations, disorganised speech, grossly disorganised or catatonic behaviour	Delusions, hallucinations, disorganised speech, grossly disorganised or catatonic behaviour	Symptoms of schizophrenia with a period of mood disturbance	Manic (at least one episode) and depressive episode, with or without psychotic features
Functional decline	In the acute phase of illness	Yes	Yes	Yes	In the acute phase of illness

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General practitioners (GPs) are often the first port of call when a patient first becomes unwell, as they are well-placed to detect functional decline in patients whom they have been seeing for years. Patients with FEP may initially present to their GPs with nonspecific symptoms, ranging from mood disturbances and anxiety to various somatic complaints. However, GPs may be unfamiliar with the clinical manifestations and treatment of early psychosis. This could lead to lost opportunities to intervene and refer patients to the appropriate mental health services, and thereby poorer clinical outcomes.[6]

WHAT CAN I DO IN MY PRACTICE?

General practitioners are in an opportune position to pick up subtle changes in the mental state of their long-term patients, for instance, unexplained changes in a patient's personality or functional decline, which could alert the GP to screen for early psychotic symptoms. They can then diagnose and initiate treatment early for patients with FEP. Timely initiation of antipsychotic treatment and early referral to a multidisciplinary mental health service via fast-track pathways such as the Assessment and Shared Care Team programme reduce the likelihood of presentation to the emergency department and the need for inpatient treatment. This also decreases the DUP and adverse outcomes. Patients who suffer from attenuated psychotic symptoms and do not reach threshold for diagnosis may not gain the attention of specialist services. Thus, GPs play an important role in monitoring such patients and making a timely referral to a psychiatrist if their symptoms worsen.

Identifying possible first-episode psychosis

Careful history taking and mental state examination [see Supplemental Digital Appendix] is key to identifying symptoms suggestive of early psychosis [Box 1].[9] Collateral history from close family members is also helpful in identifying changes from baseline behaviour and functioning. In addition, GPs should assess for comorbid conditions such as substance use, smoking, and mood and anxiety disorders. Blood investigations (e.g. full blood count, urea and electrolytes, liver function, thyroid function, B12 and folate) should be performed to exclude organic causes of psychosis such as thyroid dysfunction. Referral for neuroimaging should be considered in cases of atypical presentations or when focal neurological signs are present. Differential diagnosis includes autoimmune encephalitis (e.g. anti-N-methyl-D-aspartate encephalitis) in atypical neuropsychiatric presentations [Table 1]. Patients deemed to be of moderate to high risk to themselves or others [Box 2] should be referred to specialist mental health services.

Managing first-episode psychosis

First-episode psychosis should be managed using a biopsychosocial framework. We recommend using a shared decision-making approach with patients and their families to forge a strong therapeutic alliance. Pharmacological management with antipsychotic medications is the mainstay of treatment for psychotic disorders [Table 2].[10,11] To reduce the DUP, GPs should initiate treatment for positive symptoms with antipsychotics and arrange for early psychiatric consultation. If antipsychotics are indicated, GPs may consider a baseline cardiometabolic screen (e.g. fasting glucose and lipid profile, electrocardiogram, to check for QTc, weight and waist circumference); it is also a good practice for subsequent regular monitoring of the above with increased frequency for patients with existing cardiometabolic risk factors.

Box 1. Symptoms suggestive of psychosis during history taking.[9]

Symptom	Examples
Disturbance in mood	Irritability, restlessness, anger, anxiety, fatuous or inappropriate affect
Changes in volition	Apathy, loss of drive, loss of interest, fatigue, reduced energy, social withdrawal
Cognitive changes	Disturbance of attention and concentration, preoccupation, thought blocking
Physical symptoms	Sleep disturbance, loss of weight
Psychotic symptoms	Suspiciousness, changes in perception of the world or self, auditory hallucinations, thought interference, referential ideation, passivity
Behavioural changes	Social and occupational decline, odd or bizarre behaviour, aggression, disruptive behaviour

Box 2. Risk assessment red flags in first-episode psychosis.

- Command auditory hallucinations
- Passivity
- Referential Ideation
- Thought interference
- Aggression
- Irritability
- Self-neglect
- Significant or unexpected deterioration in function
- Active suicidal or homicidal ideation[a]

[a]Up to 75% of patients with first-episode psychosis who commit suicide do so in the early recovery phase. Risk factors include younger age, male sex, singleness, recent loss, previous high levels of premorbid functioning, anxiety regarding recent deterioration, greater insight, substance use, depression, poor adherence to treatment, and command hallucinations.

Table 2. Pharmacological treatment.[10]

Symptoms	Medication	Dose
Positive or negative symptoms of psychosis	Quetiapine[11]	Starting dose 25–50 mg/day Initial target dose 300–400 mg/day
	Risperidone[11]	Starting dose 0.5–1 mg/day Initial target dose 2–3 mg/day
	Olanzapine	Starting dose 5 mg Initial target dose 10–15 mg
Anxiety/agitation	Lorazepam	Lorazepam 0.5–1 mg TDS

Second-generation antipsychotics (SGAs) should be used in preference to first-generation antipsychotics in view of the favourable side effect profile and better tolerability of SGAs [Table 1]. Potential side effects, including metabolic issues such as weight gain, extrapyramidal symptoms and sexual dysfunction, should be discussed with the patient. Extrapyramidal side effects are more common in antipsychotic-naïve patients. In addition, weight management strategies should be encouraged before initiating antipsychotics.

General practitioners are well-placed to take advantage of the strong doctor–patient relationship to closely monitor the patient's progress. Guidelines recommend at least 1–2 years of antipsychotic treatment after FEP.[10,12] However, in practice, long-term maintenance treatment with the minimum effective and tolerable antipsychotic dose is followed, as the majority of patients suffer a relapse within 2 years of discontinuing treatment. Early follow-up within 1–2 weeks should be scheduled to review the patient's mental state and assess for potential medication side effects. Regular follow-up should be arranged once medication and the patient's mental state are stabilised. Risk assessment should be done on an ongoing basis [Box 3].

SHARED CARE AND RECOVERY-BASED MODEL

Early referral to a specialist multidisciplinary mental health service is warranted in the early phase of psychotic illness for co-management and shared care if the risk escalates or if symptoms persist or worsen despite intervention. Specialist input would include possible recommendations on antipsychotic optimisation and allied health interventions to help the patient cope with psychotic symptoms, as well as vocational and family support, if necessary.

Integrated care between specialist mental health services and GPs has been shown to improve clinical and functional outcomes for patients with psychosis.[14] The integrated care approach has been adopted internationally to recognise and treat mental health problems in young people. Its principles are aligned with the recovery-based model for psychosis.

Low-risk patients may be co-managed by GPs and specialist psychiatric services to provide more seamless and holistic treatment in the community. During the convalescent phase of illness, GPs also play an important role in encouraging patients to engage with rehabilitation services and help monitor early signs of relapse.[14] Patients with chronic mental illness are at a greater risk of cardiometabolic diseases.[15] These patients will benefit from regular monitoring of their cardiometabolic parameters. The GP may also be able to provide ongoing support and psychoeducation, and monitor the patient's mental state for early signs of relapse and medication adherence.

Shared care may reduce the risk of patients being lost to follow-up due to disengagement with tertiary services or nonadherence with medication. Active treatment and follow-up reduce the risk of illness relapse. Good psychosocial support has been shown to improve clinical outcomes such as illness remission and progression. As such, psychosocial support should be enhanced by engaging the patients' families and educating them about the illness and treatment. Patients and families should also be linked up with the relevant social support networks and community mental health services such as community outreach or community intervention teams.

Box 3. Guidelines for monitoring patient progress.[a]

Frequency of follow-up with general practitioner
- Early recovery phase: weekly
- Medium term: monthly
- Long term: three monthly

Monitor mental state

Monitor if there is:
- Development of mood symptoms and worsening of psychotic symptoms
- Overall functional improvement or decline

Medication
- Early recovery phase: early response to antipsychotic medication (a prognostic sign)
- Medium term: monitor for side effects
- Long term: after resolution of positive psychotic symptoms, antipsychotic medication may be continued for ≥12 months

Families/carers
- During the recovery phase, families are engaged at least fortnightly
- Possibility of relapse discussed with the patient and family, including early warning signs and relapse action plan

[a]Long-term prognosis of first-episode psychosis: remitting improving (58.5%), late decline (5.6%), late improvement (5.4%) and persistent (30.6%).[13]

FUTURE DEVELOPMENT

With Singapore's healthcare system taking on a population-based healthcare approach, joint local community interventions may improve service utilisation, screening and the development of pathways to access care. Supporting the Ministry of Health's drive to right-site medical care, GPs can be empowered in early detection and management of stable, low-risk mental health patients. Shared care initiatives with specialist mental health services to improve confidence in detecting, diagnosing and treating psychosis should continue to be developed in tandem with ongoing continuous medical education programmes to help GPs keep abreast of the latest developments in mental healthcare. The increased involvement of primary healthcare providers may reduce the DUP, as shown in the study by Larsen *et al*.[16]

TAKE-HOME MESSAGES

1. As FEP generally presents itself in adolescence and young adulthood, it is important to reduce the DUP to minimise disruption of their psychosocial development.
2. The GPs play an important role in the early recognition,

treatment and engagement of low-risk patients with FEP.
3. Family and community support is crucial for the patient's psychosocial support and recovery.
4. Patients who are antipsychotic naïve may be more prone to extrapyramidal side effects.
5. Patients with FEP often respond well to a lower dose of antipsychotic medication and generally show significant improvement of symptoms.
6. Positive symptoms of psychosis are generally responsive to pharmacological treatment.
7. Regular cardiometabolic monitoring is a good practice for patients on antipsychotics.
8. Early referral to a specialist mental health service is important in the early phase of illness if the risk escalates or symptoms persist or worsen despite intervention.

Closing Vignette

Agnes was initiated on risperidone 1 mg/day, and the dose was uptitrated to 2 mg/day after a week. Her auditory hallucinations and paranoid delusions fully resolved by the third week of treatment. Her parents supervised her daily medications and ensured that she went about the basic activities of daily living. She gradually resumed her regular routine of watching television with her family and going for short runs. Her sleep also reverted to her usual 7–8 h a night. She attended monthly consultations at your clinic. She took your advice to take extended medical leave. She returned to school in the following semester and successfully graduated.

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Supplemental digital content

Appendix at http://links.lww.com/SGMJ/A144

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SMC CATEGORY 3B CME PROGRAMME

Online Quiz: https://www.sma.org.sg/cme-programme

Deadline for submission: 6 pm, 08 November 2024

Question: Answer True or False
1. First-episode psychosis (FEP) only affects those with a family history of schizophrenia.
2. Psychotic disorders typically present in adolescence or early adulthood.
3. At least a third of patients with FEP may continue to experience psychotic symptoms.
4. A longer duration of untreated psychosis is associated with better clinical outcomes.
5. For patients experiencing symptoms of psychosis, stigma remains a major barrier to seeking mental health treatment.
6. First-episode psychosis can only be managed in a specialist service.
7. Good psychosocial support improves the prognosis of patients with FEP.
8. As part of the initial assessment, investigations should be performed to rule out the organic causes of psychosis.
9. Suicide risk is low in the early recovery phase of FEP.
10. Medication has a limited role in the treatment of psychosis.
11. A cardiometabolic screen is recommended before initiating antipsychotic medications.
12. Antipsychotic medication is the mainstay in the treatment of FEP.
13. Extrapyramidal side effects are common in antipsychotic-naïve patients.
14. Patients experiencing FEP may respond to lower doses of antipsychotics during the initial phase of treatment.
15. Haloperidol is preferred over risperidone as the first-line antipsychotic treatment in FEP.
16. After resolution of positive psychotic symptoms in FEP, antipsychotic medications should be stopped within 6 months.
17. Discontinuation of antipsychotic medication is associated with a high risk of relapse of psychotic illness.
18. The long-term prognosis is poor for patients with FEP.
19. Patients with chronic mental illness are more susceptible to suffer from comorbid chronic illnesses.
20. Patients do not fully recover from a psychotic disorder.

APPENDIX

Screening questions [1]
Over the last 12 months:
Have you noticed yourself being paranoid or suspicious of others?
Have you worried that someone has been out to get you? Wanting to harm you?
Do you feel like anyone is watching you, talking about you or laughing at you behind your back?
Have you had the feeling that you have special powers that other people do not have or are especially important in some way?
Have you felt that things around you had special meaning intended just for you? E.g. has the TV or radio been sending you messages?
Have you felt that someone or something outside yourself has been controlling your thoughts, feelings, actions or urges? Have you had feelings or impulses that do not seem to come from yourself?
Have you felt that ideas or thoughts have been put into your head or taken out of your head by someone or something else?
Have you felt your thoughts are less private than usual?
Have you thought that your thoughts are broadcast so that everyone can know what you are thinking? Or that people can read your mind?
Have you seen or heard things that other people do not seem to hear or see?
Observations during the interview:
Are you (the interviewer) having any trouble following the patient's answers, understanding what they are trying to say?
Are they pressured in speech?
Do they seem unable to answer questions because of being perplexed or thought blocked?
Do they go off the subject and get lost in their words?
If the patient has answered yes to any of these questions, then further investigation of symptomatology and presentation will be required as the possibility of an emerging or active psychotic illness needs to be considered

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