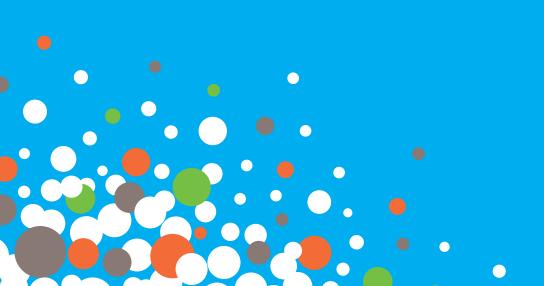


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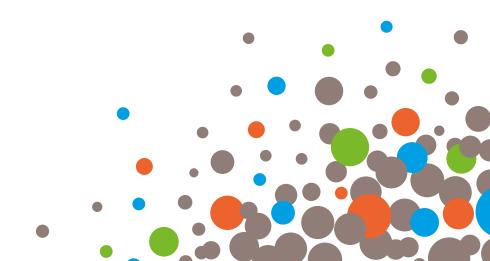




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Orygen, The National Centre of Excellence in Youth Mental Health

Locked Bag 10 Parkville Vic 3052 Australia

orygen.org.au

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Anthony Couroupis Dr Shona Francey Sarah Fraser Krista Gregory Heather Stavely

From the Second Edition

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The editorial group

Professor Patrick McGorry Simon Dodd Associate Professor Rosemary Purcell Professor Alison Yung Dr Andrew Thompson Dr Sherilyn Goldstone Associate Professor Eoin Killackey

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From the First Edition

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List of recommendations

Access to care

- **1.1** Mental health services should be accessible and provide a timely assessment for people experiencing their first episode of psychosis.
- 1.2 Enhancing help seeking:
- 1.2.1 Mental health services should provide education about early intervention to families and the wider community. The community needs to be well informed about psychotic disorders and how to obtain effective help. Community-wide initiatives to increase knowledge and reduce the stigma associated with psychosis should be implemented.
- **1.3** Enhance professional identification of psychotic symptoms:
- 1.3.1 Primary health care professionals should be competent in eliciting and recognising the early clinical features of psychotic disorders
- **1.3.2** Primary care professionals should be trained in identifying psychosis and given information about how to refer to specialist services.

- 1.3.3 Undergraduate and postgraduate medical education should be developed to allow for better training in assessment and treatment of emerging mental illness.
- 1.3.4 Close links should be developed between primary and specialist mental health services to facilitate assessment and treatment of emerging mental illness.
- 1.4 Enhance connection to appropriate services:
- **1.4.1** Specialist early detection teams should be set up to enable timely access to care.
- **1.4.2** The means to access the service and the hours of operation should be promoted and advertised to the community.
- 1.4.3 The mental health service should be accessible 24 hours/day, 7 days/week.
- 1.4.4 The service should accept potential new referrals from a wide range of individuals, family and friends, and primary care services. A low threshold for expert assessment should be set for any person suspected of developing a psychotic disorder for the first time.

Assessment

- **2.1** Assessment begins therapeutic engagement and treatment, so establishing rapport should be a priority.
- **2.2** Assessment is an ongoing process, not just restricted to initial entry into service.
- **2.3** Assessments should occur as soon as practicable after referral, and within 48 hours in the case of suspected FEP.
- 2.4 All young people presenting with possible psychosis should have a comprehensive biopsychosocial assessment by an acute treating team. This should include: developing an understanding of the personal context of illness and developing a case formulation; mental state examination; physical examination and investigations; cognitive assessment; assessment for comorbid disorders; and risk assessment.
- 2.4.1 Assessment of the personal context of illness should include: developing an understanding of the longitudinal course of symptoms and how they are regarded by the young person; and the young person's strengths, resources (including family resources), and skills in managing these symptoms specifically and other stressors more broadly.
- **2.4.2** Mental state examination, assessing signs, symptoms, and insight, is aided by an antipsychotic-free period of assessment.
- 2.4.3 Physical examination, including baseline assessment of metabolic functioning (see Guideline 3.3.2) and related lifestyle factors (such as diet and exercise) should occur to rule out an organic basis to illness, guide appropriate treatment, and enable monitoring of side effects. Basic metabolic monitoring should be ongoing and include regular weight and waist circumference measurement.

- 2.4.4 Assessment for comorbid disorders should include thorough and regular assessment of substance use (including cigarette use) and other psychiatric disorders.
- 2.4.5 Risk assessment
- 2.4.5.1 Risk assessment should be undertaken and documented at each visit, and should include routine assessment of depressive symptoms, hopelessness, suicidal intent, the effect of returning insight, and the role of psychotic features on mood.
- 2.4.5.2 Risk assessment should take into account the fluctuating nature of suicidality in young people.
- 2.4.5.3 Risk assessment should also include assessment of risk to others, risk attributable to neglect and victimisation by others, and risk of non-adherence to treatment (including absconding).

- 2.5 Where possible, informants (particularly referrers, but also other key members of the young person's social networks) should be drawn upon as valuable sources of information about the trajectory and nature of the young person's difficulties. Assessment should also consider needs of the family, their knowledge of psychosis, the impact of psychosis on the family, and their strengths and coping resources.
- **2.6** Feedback regarding assessment (particularly provisional diagnoses and possible formulation of the young person's difficulties) should be provided to the young person, and to referrers and GPs, and, where appropriate, to other key supports of the young person.
- **2.7** Rights, responsibilities and information about the treatments and services available within the service should be communicated to young people and their key supports within 48 hours of entry to the service.

Treatment for early psychosis

Recommendations for the UHR phase

- 3.1.1 The possibility of psychotic disorder should be considered for anyone who is experiencing unexplained functional decline.
- 3.1.2 If subthreshold psychotic features combined with the onset of disability indicating ultra high risk are present, the individual and their relatives should be assessed and mental state and safety monitored regularly (every 2–4 weeks) in a context of ongoing support. CBT is the preferred intervention.
- **3.1.3** Information about the level of risk should be carefully provided taking into account social, educational and cultural factors.
- **3.1.4** Syndromes such as depression and substance use, and problem areas such as interpersonal, vocational and family stress, should be appropriately managed.
- **3.1.5** CBT may reduce psychotic symptomatology and prevent or delay transition to psychosis in the pre-onset phase.
- **3.1.6** CBT may improve social functioning in the pre-onset phase.

- **3.1.7** Supportive counselling alone may improve social functioning in the pre-onset phase.
- 3.1.8 Antipsychotic medications should not normally be prescribed unless at least 1 week of frank positive psychotic symptoms have been sustained. The exception may be where briefer or milder positive symptoms are directly associated with risk of self-harm or aggression. E.g. in substance-related psychotic disorder, or when subthreshold positive psychotic symptoms persist in the face of CBT and other psychosocial treatments and are causing distress and or disability.
- **3.1.9** Omega-3 fatty acids may delay or prevent transitions to psychosis.

Recommendations for treatment of FEP: the acute phase

- 3.2.1.1 All young people with first episode psychosis should be seen by a doctor within 48 hours after entry into the early psychosis service.
- 3.2.1.2 All young people should be seen by a consultant psychiatrist within one week after entry to service.

- 3.2.1.3. All young people should be seen at least twice-weekly in the acute phase by the acute treating team, or case manager, and a doctor.
- 3.2.1.4 All families should be seen or contacted at least weekly in the acute phase by the acute treating team or case manager.
- 3.2.1.5 Antipsychotic medication should not be used during the first 24-48 hours of treatment in young people with first episode of psychosis, to facilitate assessment.
- 3.2.1.6 SGAs should be used in preference to FGAs.
- 3.2.1.7 Side effect profile should guide choice of SGA.
- 3.2.1.8 Potential side effects (including metabolic side effects, weight gain, extrapyramidal motor symptoms, and sexual side effects) should be noted and discussed with young people within a shared decision making approach, prior to pharmacotherapy commencement, and then monitored, managed and addressed early, with a prevention model if possible (e.g., weight management strategies implemented prior to treatment initiation).
- 3.2.1.9 Affective and non-affective psychosis should be distinguished to enable appropriate treatment (i.e., appropriateness of use of a mood stabiliser).
- 3.2.1.10 Pharmacological treatment should proceed with a 'start low, go slow' approach.
- 3.2.1.11 Adherence should be monitored and explicitly addressed where necessary.
- 3.2.1.12 Long-acting injectable antipsychotic medications may be offered as an alternative to oral medication within a shared decision making approach in which young people are fully informed about, and collaborate in treatment decisions.
- 3.2.1.13 Benzodiazepines may be a useful adjunct in florid psychosis for sedation.
- 3.2.1.14 Treatment of the primary psychotic disorder should be prioritised unless comorbidity leads to high levels of risk to self or others or clinical judgement considers that the comorbidity has a major impact on the primary psychotic disorder (e.g., cannabis dependence).

- 3.2.1.15 With the exception of the above situations, polypharmacy should be avoided, specifically the use of multiple antipsychotics.
- 3.2.1.16 CBT, supportive therapy, or befriending should be provided during the acute phase, with CBT having the most immediate benefit.

Recommendations for FEP treatment in the early recovery phase

- 3.2.2.1 Treatment response and adherence should be regularly reviewed. All young people with early psychosis should be seen at least weekly by a case manager, and at least fortnightly by a doctor, in the early recovery phase.
- 3.2.2.2 All families should be seen or contacted at least fortnightly during the early recovery phase.
- 3.2.2.3 Early response to antipsychotic medication should be considered as a prognostic sign.
- 3.2.2.4 CBT interventions may be indicated in this group, as it may speed up recovery, reduce period of hospitalisation, enhance short-term adaptation to illness, reduce positive symptoms, and improve personal goal attainment.
- 3.2.2.5 The possibility of relapse should be discussed with young people and their families, along with education regarding early warning signs and the development of a 'relapse action' plan.

Recommendations for treatment of FEP relapse

- 3.2.3.1 Medication should be recommenced or increased at early signs of relapse.
- 3.2.3.2 The advantages of maintenance antipsychotic therapy in relapse prevention should be weighed against any impact of side effects on functioning.
- 3.2.3.3 Relapse prevention strategies (including more regular review and provision of information about rapid access to care) are particularly indicated if medication dosages are decreased or medication ceased.
- 3.2.3.4 Specialised FEP interventions and combined family and individual CBT specifically focusing on preventing relapse should be used.

Recommendations for treatment of FEP: incomplete recovery, medication discontinuation and discharge

- 3.2.4.1 All young people being treated should be seen at least fortnightly by a case manager, and at least monthly by a doctor, during the late recovery phase.
- 3.2.4.2 All families should be seen or contacted at least 2-monthly by the treating team during the late recovery phase.
- 3.2.4.3 People with persisting positive or negative symptoms should be identified early.
- 3.2.4.4 Clozapine should be considered for those who have not responded to adequate trials of two antipsychotic medications, of which one is a SGA.
- 3.2.4.5 After resolution of positive psychotic symptoms, antipsychotic medication may be continued for 12 months or more. A shared decision making approach and a comprehensive evaluation of the risks and benefits of ongoing medication in each particular case should inform treatment decisions.

- 3.2.4.6 CBT should be considered as an adjunctive therapy during late/problematic recovery.
- 3.2.4.7 Families of young people with a slow or difficult recovery or frequent relapses may benefit from more intensive and structured interventions, emphasising problem solving and communication skills.
- 3.2.4.8 Young people with early psychosis should have their risk regularly reviewed by clinicians, particularly during transitions from acute care and at discharge from the service.
- 3.2.4.9 Clinicians should clearly communicate and document a discharge plan that is shared with the young person, their family, their GP and the new service provider at least 3 months prior to discharge.
- 3.2.4.10 Clinicians should assist young people in their care with orientation and engagement with future treatment providers, including a visit and clinical handover to the designated clinician, such as a GP, or other mental health service clinician.

Recommendations for early psychosis treatment across all phases

Engagement

3.3.1.1 Engagement should be prioritised as the foundation of early psychosis treatment.

Physical health

- 3.3.2.1 Routine metabolic screening should guide intervention, and prevention of physical ill-health must be prioritised as part of routine early psychosis treatment (see http://www.heti.nsw.gov.au for adolescent cardiometabolic health screening protocol)
- 3.3.2.2 Cardiometabolic screening should occur on entry into service, after medication changes, repeated at 1-month and monitored at least every 3 months. Initial screening points should be repeated after any medication changes.
- 3.3.2.3 Potential physical side effects (including metabolic side effects, weight gain, extrapyramidal

motor symptoms, and sexual side effects) should be noted and discussed with people prior to their commencing pharmacotherapy. Such effects should be monitored, managed and addressed early, with a prevention model if possible (e.g., weight management strategies implemented prior to treatment initiation).

- 3.3.2.4 Structured behavioural lifestyle interventions should be implemented to improve physical health outcomes for people with early psychosis.
- 3.3.2.5 Tobacco cessation should be offered routinely to young people with early psychosis.
- 3.3.2.6 Oral health assessment should form a part of routine assessment using standard checklists that can be completed by non-dental personnel.
- 3.3.2.7 Where lifestyle interventions prove ineffective after at least 3 months, consider specific pharmacological interventions (e.g., metformin, antihypertensive treatment, statins)

Sexual health

- 3.3.3.1 Clinicians need to be aware and informed of sexual health issues and potential dysfunction in early psychosis populations.
- 3.3.3.2 Clinicians should inform young people experiencing sexual dysfunction that sexual difficulties are also common in the general population.
- 3.3.3.3 Clinicians should assess baseline sexual functioning to monitor sexual related side effects of antipsychotic treatment.
- 3.3.3.4 Clinicians should be aware that use a standardised assessment instrument may facilitate open communication about sexual functioning.
- 3.3.3.5 Clinicians should focus on risk-reduction interventions such as condom use

Case management

- 3.3.4.1 The case manager or treating clinician coordinates each individual's treatment and care throughout their episode of care.
- 3.3.4.2 The case manager should be present at medical appointments to ensure continuity of care.
- 3.3.4.3 A case formulation, including provisional diagnosis and management plan, should be completed by case managers and/or treating team within 6 weeks of discharge from acute treatment.
- 3.3.4.4 Case managers should facilitate a person's access to the necessary accommodation, vocational, recreational, welfare and primary health services.
- 3.3.4.5 Case managers should regularly consult with individuals' GPs, at least every 6 months.
- 3.3.4.6 Case managers should utilise shared decision making, a strengths-based and recovery approach to case management.

Functional recovery

3.3.5.1 Treatment of early psychosis should give equal weight to both symptomatic and functional recovery. Clinicians should focus on remission of symptoms and also prioritise functional recovery assessment of a young person's functional capacities, performance and needs.

- 3.3.5.2 Clinicians should promote functional recovery by directly implementing interventions and coordinating care in services.
- 3.3.5.3 Clinicians should facilitate access to educational and vocational services to the FEP and pre-onset groups
- 3.3.5.4 Employment and educational consultants should be integrated within FEP services as much as possible.
- 3.3.5.5 Employment services for people with FEP should be consistent with an individual placement and support model.
- 3.3.5.6 Vocational goals should be formulated in collaboration with the individual being treated, be developmentally appropriate and may include education and training.
- 3.3.5.7 Cognitive remediation programs and/or cognitive adaptation strategies should be offered to young people who have cognitive deficits that interfere with functional recovery.

Trauma

- 3.3.6.1 Early psychosis clinicians should develop a rapport with young people with early psychosis and then sensitively assess their current trauma and trauma history. This includes the experience of having a psychotic episode. This assessment should be incorporated into psychological treatment plans.
- 3.3.6.2 Early psychosis services should have policies in place to deal with reports or situations of ongoing trauma.
- 3.3.6.3 Clinicians should seek training, support and supervision as required for this work.
- 3.3.6.4 Clinicians should be mindful of the increased likelihood of depression and anxiety that accompanies exposure to trauma, and treat these accordingly.
- 3.3.6.5 Trauma-focused psychological interventions may be effective in reducing PTSD and psychotic symptoms in young people with psychosis.

Integrated specialist treatment

3.3.7.1 Integrated specialist services are more effective than standard services in the treatment of people with FEP.

Least restrictive treatment

- 3.3.8.1 People with early psychosis should receive treatment in the least restrictive manner possible. Whenever possible, the location of the initial assessment should be community-based and at a place that is convenient to the person and their family.
- 3.3.8.2 A range of treatment settings should be available to people, including home-based support, supported accommodation, rooming in, outpatient services, and inpatient care.
- 3.3.8.3 The levels of risk (to self and others), the available resources (including community support) and the needs of the individual and their family should be assessed to determine whether the individual can be managed at home.
- 3.3.8.4 Where hospitalisation is required, people should be admitted to a facility that can cater for, and is appropriate to, their age and stage of illness. Where streaming is not possible, a special section may be created in a general acute unit for young people with recent-onset psychosis.
- 3.3.8.5 Community treatment orders should be used for the minimum duration required to meet specified treatment goals.
- 3.3.8.6 Involvement of police to enforce treatment should be kept to a minimum and used as a last resort in the case of immediate risk.
- 3.3.8.7 The use of seclusion (if used at all) should be kept to the minimum frequency and duration to meet the treatment aims when managing people who are high-risk.

Family involvement

- 3.3.9.1 The needs of individual family members should be recognised and addressed (where appropriate, within clinical services, or alternatively, by referral to external agencies) at all stages of a person's recovery.
- 3.3.9.2 The case manager should have frequent contact relevant to the phase of illness and the needs of the individual and their family.
- 3.3.9.3 Family attendance and involvement should be reviewed as part of the clinical review process.
- 3.3.9.4 The treating clinician should assist the family by providing information about psychotic disorders (including the recovery process) and

- by helping the family, where necessary, develop skills in problem solving and enhanced coping strategies.
- 3.3.9.5 The treating clinician should maximise the responsiveness of the family to early warning signs in order to facilitate relapse prevention.
- 3.3.9.6 Where necessary, the clinician should prepare the family to deal with crises.
- 3.3.9.7 Family peer support workers may be a useful resource for information and emotional support, particularly in situations when an individual being treated does not support the involvement of the family.
- 3.3.9.8 Families with more complex needs, such as those with a history of sexual and/or other abuse or long-standing emotional conflict, may need to be referred to specialist agencies.
- 3.3.9.9 Early psychosis services should endeavour to establish a family peer support component within their service.

Goals to guide treatment

- 3.3.10.1 Both the case manager and treating doctor should meet with the individual being treated and, where possible, their family, and develop an individual service plan within 4–6 weeks after entry to a service.
- 3.3.10.2 The case manager should regularly review the individual service plan with the individual.

Group programs

- 3.3.11.1 Group programs should be offered to those with FEP and at UHR.
- 3.3.11.2 Group programs should be available in a range of clinical and community settings.
- 3.3.11.3 Group programs should be tailored to the different needs of people at different phases of illness.
- 3.3.11.4 Decisions about participation in any group program should be made collaboratively with the individual, based on an understanding of the potential benefits for that person.
- 3.3.11.5 Goals should be set collaboratively and progress of participants towards these goals should be regularly reviewed.

- 3.3.11.6 The development of group programs should be based on a thorough planning process which includes needs assessment, the setting of objectives, development of content areas and establishment of evaluation strategies.
- 3.3.11.7 Where appropriate, group program staff should assist people to find meaningful psychosocial activities (such as other groups/activities) external to clinical services.
- 3.3.11.8 There should be an effective clinical interface between the group program and the case manager (or treating clinician) or multidisciplinary team.

Psychoeducation

- 3.3.12.1 Psychoeducation should be provided for people with early psychosis and their families.
- 3.3.12.2 The case manager and the treating doctor are responsible for ensuring access to psychoeducation.
- 3.3.12.3 Psychoeducational material should be appropriate for young people and for early psychosis.
- 3.3.12.4 Psychoeducation and support should be provided to the individual and their family on an initial, continuing and 'as needed' basis through individual work, group programs and a consumer support groups or a family participation program.
- 3.3.12.5 People and families of a culturally or linguistically diverse background should have access to information in their own language, using interpreters where appropriate.

Suicide prevention

- 3.3.13.1 Intensive treatment should be provided during high-risk phases of illness.
- 3.3.13.2 Services should develop and implement appropriate, evidence-based interventions for deliberate self-harm. The LifeSPAN program is likely to be of some benefit for suicidal individuals.
- 3.3.13.3 SGAs, especially clozapine may be useful for suicidality.

Substance use

3.3.14.1 Psychoeducation and CBT may help reduce substance use in those in the pre-onset phase and with FEP.

- 3.3.14.2 Treatment of psychosis and comorbid substance use (including tobacco use) should be integrated.
- 3.3.14.3 Acceptance policies should be inclusive of individuals with comorbid substance use.
- 3.3.14.4 Policies and procedures should be developed regarding substance use and its behavioural consequences, including the possibility of substance use while within the service.
- 3.3.14.5 Services should develop minimum standards for clinicians regarding their knowledge about the assessment and integrated treatment of substance use.
- 3.3.14.6 Where appropriate, clinicians should have access to specialist consultation to provide assessment, supervision, advice or comanagement for comorbid substance misuse (including tobacco use).
- 3.3.14.7 Where people are receiving treatment within a drug treatment service, clinicians should actively collaborate and communicate about the individual treatment plan.
- 3.3.14.8 Individual treatment plans should routinely include additional treatment goals relevant to substance use.
- 3.3.14.9 Support should be offered to family and friends, including psychoeducation on comorbid mental illness and substance use.
- 3.3.14.10 Discharge planning should include attention to ongoing treatment of substance use.

Comorbidities

- 3.3.15.1 All people with early psychosis, regardless of comorbidities should receive treatment from early psychosis services.
- 3.3.15.2 Clinicians should conduct comprehensive assessment of comorbidities and consider the impact of these, and adapt early psychosis treatment as appropriate.
- 3.3.15.3 Treatment of psychiatric comorbidity should be conducted in a consistent manner with available clinical guidelines.
- 3.3.15.4 Although treatment of psychosis often remains paramount, the sequencing of treatment of comorbid conditions should be driven by the

symptoms/disorder that is most distressing/ disabling and whether it poses further risks to the person being treated or others.

Miscellaneous therapies

3.3.16 Milieu therapy, supportive psychodynamic therapy, and cognitive remediation therapy may be useful in treating symptoms and/or improving functioning in FEP.

Youth participation

- 3.3.17.1 The culture of an early psychosis organisation should respect young people and encourage their input.
- 3.3.17.2 All youth participation initiatives should be jointly planned with young people from the

outset, and based on the needs and interests of young people.

3.3.17.3 Early psychosis services should endeavour to establish a peer support component within their service.

Family participation

- 3.3.18.1 Early psychosis services should endeavour to establish a family peer support component within their service.
- 3.3.18.2 Families participating in the service should receive some payment, and funding should be available to allow family peer support workers to acquire any specialist skills that they may need in their role. Family peers support workers should also receive training, ongoing supervision and support from a clinical mentor.

Diversity and specific populations

Aboriginal and Torres Strait Islander communities

- **4.1.1** Clinicians should be especially alert to the side effects of antipsychotics when working with people from Aboriginal and Torres Strait Islander communities.
- 4.1.2 Indigenous health or mental health practitioners should be involved in the assessment and treatment of Indigenous people with emerging psychosis to facilitate engagement and reduce stigma.
- 4.1.3 Clinicians should practice in a manner consistent with relevant guidelines on working with people from Aboriginal and Torres Strait Islander communities (e.g., Aboriginal Mental Health First Aid Training and Research Program, 2008).

Culturally and linguistically diverse communities

- **4.2.1** People with early psychosis or family members who cannot speak English, or who speak limited English, should be able to access professional interpreting and translating services.
- **4.2.2** Clinicians should refer to appropriate guidelines when working with interpreters and have training and support for this work.
- **4.2.3** Clinicians should seek education and advice about the cultures of the young people and families that they work with in order to practice in culturally-sensitive ways. They should seek training, and supervision for this work and be supported in this by their early psychosis service.

Rural and remote populations

- **4.3.1** Early psychosis prevention and intervention information should be readily available at key locations in rural and remote areas, for example in GPs' waiting rooms and community centres.
- **4.3.2** Mental health services should provide tertiary consultation and education services to health practitioners in rural and remote areas.
- **4.3.3** Telepsychiatry and other technological facilities should be made available to mental health practitioners in rural and remote areas to facilitate links with early psychosis services. These should not, however, be seen as a replacement for visiting specialists.

LGBTIQ

- **4.4.1** Clinicians should avoid assuming what a young person's gender identity or sexual attraction is. This should be ascertained as part of a comprehensive mental health assessment.
- **4.4.2** Clinicians should pay careful attention to risk and its assessment in LGBTIQ people.
- 4.4.3 Clinicians should identify and address stressors that LGBTIQ young people have that also comprise risk factors for psychosis (i.e., by referring to specialised LGBTIQ services, building coping strategies and resilience in response to potential bullying, discrimination, and trauma).
- **4.4.4** LGBTIQ young people should be linked with supportive communities, and group support networks.

Homelessness

- **4.5.1** Early psychosis clinicians should recognise that stable, secure and appropriate housing is essential to recovery from mental illness and the maintenance of wellness.
- **4.5.2** Early psychosis clinicians should recognise risk factors for homelessness in people with early psychosis in order to intervene early.
- **4.5.3** Early psychosis services should partner and collaborate with youth homelessness services in order to facilitate access to services and co-ordinated care.
- **4.5.4** Early psychosis clinicians should focus on the development of independent living skills in their young people with early psychosis.
- **4.5.5** Early psychosis clinicians should work on maintaining and improving familial relationships even if a young person is homeless.

Abbreviations

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Abbreviation	Definition	Abbreviation	Definition
ARMS	At risk mental state of psychosis	IMI	Intramuscular injection
BLIPS	Brief limited intermittent psychotic symptoms	LEO	Lambeth Early Onset
CAARMS	Comprehensive Assessment of At Risk Mental State	LGBTIQ	Lesbian, Gay, Bisexual, Transgender, Intersex, Queer
CALD	Culturally and linguistically diverse	MHS	Mental health services
CAT	Cognitive analytic therapy	MSE	Mental state examination
СВТ	Cognitive-behavioural therapy	NEPP	National Early Psychosis Project
СОРЕ	Cognitively oriented psychotherapy in early psychosis	NESB	Non-English speaking background
СРТ	Cognitive processing therapy	OCD	Obsessive compulsive disorder
CRT	Cognitive remediation therapy	PACE	Personal Assessment and Crisis Evaluation
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders – 4th Edition	PE	Prolonged exposure
DSM 5	Diagnostic and Statistical Manual of Mental Disorders – 5th Edition	PTSD	Post-traumatic stress disorder
DUI	Duration of untreated illness	RAISE	Recovery after initial schizophrenia episode
DUP	Duration of untreated psychosis	RCT	Randomised controlled trial
ECT	Electroconvulsive therapy	SD	Sexual dysfunction
EE	Expressed emotion	SGA	Second-generation antipsychotics
EMDR	Eye-movement desensitisation reprocessing	SoCRATES	Study of cognitive realignment therapy in early schizophrenia
EPPIC	Early Psychosis Prevention and Intervention Centre Melbourne	SOS	Start over and survive
EPS	Extrapyramidal side effects	STI	Sexually transmitted infection
EPMS	Extrapyramidal motor symptoms	STOPP	Systematic Treatment of Persistent Psychosis
FEP	First episode psychosis	TAU	Treatment as usual
FGA	First-generation antipsychotics	TFCBT	Treatment-focused CBT
GRIP	Graduated recovery intervention program	UHR	Ultra high risk of psychosis

Section 1. **Introduction**



Section 1. Introduction

What are clinical practice guidelines?

Clinical practice guidelines are defined as systematically developed statements, based on the best available evidence, to assist practitioners and clients to make decisions about appropriate health care. They form part of the larger model of evidence-based practice, which integrates the best available evidence, clinician expertise, and client preferences.

The initial guidelines and the rationale for early intervention in psychotic disorders

The initial guidelines were developed in response to growing research and clinical interest in a model of psychosis that challenged the pessimism prevailing at the time regarding the prognosis of people with psychosis. This earlier model developed from the Kraepelinian concept that true psychotic disorder was degenerative, and therefore could only be validly characterised by poor outcome [12, 15]. The alternative model advocates that young people should receive timely and comprehensive intervention during the critical years following onset, and that 'withholding treatment until severe and less reversible symptomatic and functional impairment have become entrenched represents a failure of care' (McGorry et al., 2008, p. 148 [15]). Specifically, the model proposed in the first edition of the guidelines suggested that intervening early in the course of acute psychosis is crucial for a number of reasons:

 it enables timely reduction of distressing experiences

- it was thought that early intervention would reduce the duration of untreated psychosis (DUP), one of the few obviously malleable candidate risk factors for poor outcome
- it was proposed to be associated with better outcome in the short-term, perhaps because of an effect it may have on DUP
- · it was believed to be cost-effective, and
- in the case of the putative prodrome, it was thought early intervention might prevent onset of psychotic disorder.

The need for the second edition

Significant changes have occurred since the development of the initial guidelines. There is increasing evidence demonstrating the effectiveness of early intervention in psychotic disorders. Now, many of the proposals of the early proponents of early intervention are supported by a more substantial evidence base. For example, it is now clear that DUP is related to outcome in first episode psychosis, with longer DUP being related to short-term factors such as slower and less complete recovery, poorer response to antipsychotics, interference with social and psychological development, and an increased risk of relapse [16-21] and likely medium-term outcome [22, 23]. Early intervention does reduce DUP [24], is associated with better short-term outcome, and appears to be more cost-effective than standard services [23, 25, 26]. Additionally, empirical evidence now suggests that intervention during the putative prodrome may prevent or delay transition to psychosis [27-29]. New guidelines are therefore required that reflect these developments.

This additional evidence has prompted widespread national and international efforts for reform in services and treatment approaches for early psychosis [30, 31]. There are now close to

200 early intervention centres worldwide, which focus on the special needs of young people and their families [32, 33]. Clinical practice guidelines relating to assessment and treatment of early psychosis now exist in a number of countries (e.g., Canada, the UK, the US), and international clinical practice guidelines and a consensus statement have been published [33, 34]. The International Early Psychosis Association (IEPA) reflects this groundswell of support for the continued exploration of an evidence-based adoption of principles of early intervention. Given the increasing interest in early intervention models, further services are likely to develop, rendering it appropriate to provide guidelines for best clinical practice and service development based on the experiences of existing services.

The National Health and Medical Research Council (NHMRC) have also, since the last guidelines, updated their designation of levels of evidence, as outlined in Table 1. More broadly, the NHMRC has created 'grades' of recommendations which take into account not only the evidence base (quantity and quality), but also the consistency of the findings that constitute the evidence base, the clinical impact of findings, the generalisability of findings to all those to whom the guidelines are likely to be applied, and their applicability to the Australian health care context [35]. This edition of the guidelines therefore makes reference to these grades (as outlined in Table 2) when making any recommendations.

The following recommendations are based, where possible, on meta-analyses or systematic

reviews of the available evidence from randomised controlled trials for treating individuals with early psychosis (i.e., level I evidence). Where such systematic evidence is not available, lower order evidence has been used. We are aware that evidence does not exist regarding all domains of treatment in early psychosis, and the absence of this evidence does not necessarily mean practices or interventions are ineffective. In partial recognition of this, in the absence of any evidence base, guidelines that reflect good practice according to expert consensus (as reflected in other guidelines, such as the previous edition of these guidelines or the WHO/IEPA consensus statement [34]) are given the designation 'GPP' (good practice point).

Update to the second edition

Early psychosis services and the evidence base supporting the early intervention approach have continued to grow since the second edition of the Australian Clinical Guidelines for Early Psychosis was published in 2010. With further expansion of early psychosis services both nationally and internationally and the development of educational resources to support this, it is timely to update the second edition of the guidelines. The development of these resources and the needs of new services identified some new areas for guideline development and some areas in need of updating. This update has been produced as an interim measure prior to the expected release of a complete new third edition.

Table 1. Levels of evidence ratings (NHMRC, 1998)

NHMRC Level	Basis of evidence
1	Evidence obtained from a systematic review of all relevant randomised controlled trials
II	Evidence obtained from at least one properly designed randomised controlled trial
III - 1	Evidence obtained from well-designed pseudo-randomised controlled trials (alternate allocation or some other method)
III - 2	Evidence obtained from comparative studies (including systematic reviews of such studies) with concurrent controls and allocation not randomised, cohort studies, case-control studies, or interrupted time series with a control group
III - 3	Evidence obtained from comparative studies with historical control, two or more single arm studies, or interrupted time series without a parallel group
IV	Evidence obtained from case series, either post-test or pre-test/post-test

Table 2. NHMRC grades of recommendation

Grade of recommendation	Description
A	Body of evidence can be trusted to guide practice
В	Body of evidence can be trusted to guide practice in most situations
С	Body of evidence provided some support for recommendation but care should be taken in its application
D	Body of evidence is weak and recommendation must be applied with caution

The process, structure, and scope of the revised guidelines

Process of guideline development

The original guidelines were developed to address clinical 'best practice' in early psychosis prevention and intervention. A working group comprising the state and territory coordinators of the National Early Psychosis Project (NEPP), the national project manager and the project director, convened to determine the content of the clinical practice guidelines.

The development process involved:

- initial drafting of the guidelines. This was performed by a consultant in conjunction with the NEPP Working Group, a number of expert consultants with clinical and research experience, state-based steering committees and individuals in the field
- development and dissemination of the draft for national consultation. State and territory coordinators were responsible for distributing the document to key stakeholders in mental health and early psychosis
- 3. integration of reviewers' comments into the document and the preparation of the final draft.

The first phase of the revision process ensured that the Australian guidelines were consistent with the *International Clinical Practice Guidelines for Early Psychosis* [33]. The second phase of the revision process involved a literature review, focusing on publications since 1998. This literature review used the following databases: Medline, PsychINFO, and the Cochrane Library. Searches were restricted to publications in English.

Process of the update

Many experts (see 'List of Contributors' on page 111) have been consulted and extensive literature reviews have been completed in the development of material included in this update to the second edition. However, systematic reviews of the literature have not been undertaken and it is possible that recent evidence in some areas has not been included. Systematic reviews of relevant databases will be conducted in the preparation of the third edition of the Australian Clinical Guidelines for Early Psychosis, for which planning has commenced.

Structure of the second edition

The format of the guidelines follows the access, assessment, and treatment phases of service engagement. Guidelines relating to access and engagement are broadly similar across the ultra high risk (UHR) and first-episode stages. However, some treatment guidelines are specific to the UHR stage and others to the period after the onset of psychosis. Treatment guidelines may also be specific to the various stages after the onset of frank psychosis. Other issues are likely to be relevant regardless of whether someone is at risk of developing psychosis or has experienced frank psychosis. For these reasons, treatment guidelines are first presented with respect to the ultra high risk period, and then guidelines relating to the various stages of illness post-onset are outlined. The final treatment guidelines are those that apply across all stages of illness, including the UHR stage.

Issues relevant to specific populations (e.g., culturally and linguistically diverse groups, rural and remote communities) are addressed in their own sections. Each section has introductory

information, and then specific recommendations, accompanied by the level of evidence on which they are based.

Structure of the update to the second edition

The update to the second edition largely retains the structure of the second edition and introduces new sections. Guidelines 3.3 ('General principles regardless of FEP stage') and 3.4 ('General principles related to treatment in early intervention for psychotic disorders') have been collapsed into one Guideline 3.3, titled, 'Early psychosis treatment across all phases'.

Guideline 4, 'Specific populations', now contains two additional guidelines: 'LGBTIQ – same sexattracted and gender diverse' and 'Young people experiencing homelessness'. A comprehensive review of the existing sections of Guideline 4 was considered beyond the scope of this update and will be conducted for the next edition.

Other new guidelines included in the update are: 'Physical health', 'Sexual health', 'Functional recovery', 'Discharge planning' and 'Shared decision making'. Other sections have been updated as required.

Scope of the guidelines

These guidelines have been developed as an evidence-based resource for mental health practitioners who treat people experiencing early psychosis. It may also be used as a reference for individuals outside specialist mental health services, particularly in the primary health care sector. The authors recognise that the structure and resources of mental health services vary considerably among the states and territories, but this should not be viewed as an impediment to implementing an appropriate early psychosis prevention and intervention strategy. The fundamental principle is that all Australians with emerging psychotic disorders have a right to early diagnosis and quality treatment. Therefore, the guidelines have been framed in terms of optimal service provision, while also providing a realworld focus. The recommendations operate as evidence-based guidelines rather than hard-andfast rules, and should be used together with the preferences of the person receiving treatment and the clinical judgement of the clinician.

Limitations of the update to the second edition guidelines

These guidelines are limited primarily by a focus on English-language evidence published prior to April 2016. It is possible that incorporating unpublished evidence or evidence in other languages may have altered our recommendations.

The nature of psychosis

Definitions

Psychosis refers to symptoms in which there is misinterpretation and misapprehension of the nature of reality, for example disturbances in perception (hallucinations), disturbances of belief and interpretation of the environment (delusions), and disorganised speech patterns (thought disorder). Psychotic symptoms need to be distinguished from psychotic disorder, as outlined below. Diagnostic classification systems (e.g., the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, or DSM-5 [36]; International Statistical Classification of Diseases and Related Health Problems, or ICD [37]) generally list specific psychotic disorders rather than psychosis or psychotic disorder more broadly. The DSM, for example, identifies the psychoses as schizophrenia, schizophreniform disorder, schizoaffective disorder, schizotypal personality disorder, delusional disorder, brief psychotic disorder, substance/medicationinduced psychotic disorder, psychotic disorder due to another medical condition, catatonia, catatonia associated with another mental disorder. catatonic disorder due to another medical condition, unspecified catatonia, other specified and unspecified schizophrenia spectrum and other psychotic disorder. Meeting diagnostic criteria for any one of these disorders is generally regarded as the threshold for treatment. Such diagnoses, however, require both clear symptom profiles, and a specified duration of these symptoms, which appears more appropriate in the context of chronicity.

Making the distinction between diagnostic categories early in the course of psychosis may be difficult. This may be because of fluidity of acute symptoms, or the vagaries of nosologies themselves [38]. Initial diagnoses of first episode brief psychotic disorder, unspecified schizophrenia spectrum and other psychotic disorder, substance/medication-induced psychosis, and schizophreniform disorder are particularly likely to change over follow-up periods [39-43]. Additionally, the traditional pessimism associated with the diagnosis of schizophrenia has permeated professional and popular culture to some extent [44]. Making rigid and too-specific diagnoses may therefore not only be unreliable but have iatrogenic effects on the optimism of both clinicians and people receiving care and on the potential for recovery. For these reasons, these guidelines refer to the psychoses broadly, as shorthand for psychotic disorders, rather than being limited to a specific psychotic disorder.

'Early psychosis' refers to the early course of psychotic disorder, and in these guidelines specifically refers to the prodrome and the period up to five years from first entry into treatment for a psychotic episode (i.e., first episode psychosis, or FEP).

Aetiology

Many factors may be causally linked to the development of psychiatric disorders, but they can generally be categorised into three main groups: biological, psychological and social. Biological factors arise from physiology, biochemistry, genetics and physical constitution, and may be present from birth. The young person's upbringing, emotional experiences and interaction with other people constitute psychological factors. Social factors are associated with the young person's present life situation and sociocultural background. The biopsychosocial model acknowledges the role of these biological, psychological, and social factors in the onset and course of psychiatric disorder and forms a framework within which more specific models may be developed.

The aetiology of psychosis is generally accepted as resulting from the impact of stress and other risk factors upon a biological predisposition: the 'stress-vulnerability' interaction [45, 46]. Stress-vulnerability models have been applied to schizophrenia, but are equally applicable to early psychosis, and emphasise genetic, neuronal, life stress and physical vulnerabilities [45, 47]. The greater the person's vulnerability, the less stress is required to trigger an episode of psychosis [48-50].

Factors that may influence levels of vulnerability and/or stress, and therefore predict onset of psychosis, are outlined in Table 3.

Table 3. Risk factors for psychosis onset

Distal (premorbid) risk factors

Foetal life:

- Maternal pregnancy complications/perinatal trauma, (especially foetal hypoxia)[51]
- Family history of psychotic disorder (for a review, see Olin & Mednick, 1996 [52])
- Candidate genes (DTNBP1, NRG1, DAOA, RGS4, COMT, DISC1, DISC2, BDNF; for a review, see Weinberger & Berger, 2009 [53])
- Developmental delay (for a review, see Rustin et al., 1997 [54])
- Season of birth (late winter/early spring[55, 56])
- Ethnic minority group membership [57]

Early life:

- Quality of early rearing environment
- Trauma (abuse or neglect) [58]
- Vulnerable personality (e.g., schizoid personality [59, 60])

Proximal risk factors

Late childhood/adolescence:

- Age [61]
- Urbanicity [62]
- Substance (especially cannabis) use [63]
- Traumatic head injury (for a review, see Kim et al., 2007 [64])
- Stressful life events (for a review, see Phillips et al., 2007 [65])
- Subtle impairments in cognition (for a review, see Pantelis et al., 2009 [66])
- Poor functioning [67, 68]
- Cognitive, affective, and social disturbances subjectively experienced by the individual ('basic symptoms')[69]
- Migration [70]

Epidemiology

Psychotic disorders usually emerge during adolescence or early adulthood. They tend to be characterised initially by impaired social functioning and nonspecific 'neurotic' symptoms, which are then followed by attenuated or subthreshold forms of psychotic symptoms and which emerge just prior to the development of frank psychosis [71]. For example, in one study, the prodromes of major depression and schizophrenia were found to be indistinguishable [72].

Estimates of the incidence of early psychosis vary widely [73]. An Australian study of low-prevalence psychiatric disorders found the prevalence of individuals with psychosis engaging in treatment in a 1-month period was 4.7 per 1000 adults [74]. This is likely to be an underestimate of the true prevalence of psychotic disorders, as it did not include people in the community who were not receiving treatment [75]. Schizophrenia is the third leading cause of burden and injury in young men aged 15–24 years, and the fifth in young women of the same age [76].

Experiencing psychotic symptoms does not, however, necessarily indicate the presence of a disorder. Psychotic symptoms seem to be part of the continuum of normal experiences, with a median prevalence of 5% and incidence of 3% in the general population; between 75% and 90% of psychotic experiences are transitory and disappear with time [77]. The continuum of psychosis is outlined in Figure 1.

Figure 1. Example of the continuum of psychotic-like experiences



Course of illness

The previous edition of these guidelines focused on a 'stage' model of psychosis, comprising four stages: (i) prodrome, (ii) acute onset of psychotic disorder, (iii) early recovery, and (iv) late/problematic recovery. There has been a recent argument, however, to shift the lens through which early intervention specifically, and psychiatric nosology in general, is viewed [78], with a focus on the concept of the clinical staging model.

This section defines the clinical staging model and reviews its different stages, with a particular focus on the putative prodrome.

The clinical staging model

The clinical staging model differs from conventional diagnostic practice by defining the course of illness as a continuum [78]. Clinical staging models assume that treatments that are offered earlier in the course of an illness have the potential to be safer, more acceptable and more effective, as well as more affordable than those offered later in the course of disorder. Interventions can then be evaluated in terms of their ability to prevent or delay progression from earlier to later stages of illness, and can

be selected by consumers and clinicians on the basis of defined risk/benefit criteria which are likely to differ across different stages of illness. Such models are widely used in mainstream medicine; their application to psychiatry appears both appropriate and, given increasing interest in models of early intervention in psychiatry, timely. Such a model can guide the logic and timing of interventions in psychosis and psychiatry more broadly, enabling the use of practical, preventive strategies routinely embraced in other types of mainstream health care [15]. The clinical staging model of psychosis can also provide a clinically meaningful framework for disseminating knowledge and research findings. Table 4 outlines the clinical staging model in its application to psychotic disorders.

Table 4. Clinical staging model for psychotic disorders

Clinical stage	Definition	Definition in the 'phase' model	Target populations for recruitment	Potential interventions
0	Increased risk of psychosis No symptoms currently	Premorbid	First-degree teenage relatives of the person with the disorder	Indicated prevention of FEP, e.g: Improved mental health literacy Family education Drug education Brief cognitive skills training
1a	Mild or non-specific symptoms of psychosis, including neurocognitive deficits. Mild functional change or decline	Possible prodrome	Screening of teenage populations Referral by: • primary care physicians • school counsellors	Indicated secondary prevention of FEP, e.g: Formal mental health literacy Family psychoeducation CBT Actively reduce substance use
1b	Ultra high risk of psychosis: Moderate but subthreshold symptoms, with moderate neurocognitive changes and functional decline to caseness or chronic poor functioning (≥ 30% drop in SOFAS in previous 12 months OR < 50 for previous 12 months)	Possible prodrome	Referral by: educational agencies primary care physicians emergency departments welfare agencies school and university counsellors	Indicated secondary prevention of FEP, e.g: Psychoeducation CBT Substance use work (cessation or harmreduction) Omega-3 fatty acids Antidepressant agents or mood stabilisers
2	First episode of psychotic disorder: Full threshold disorder with moderate-severe symptoms, neurocognitive deficits and functional decline (GAF 30-50) Includes acute and early recovery periods	Acute and early recovery	Referral by: • primary care physicians • emergency departments • welfare agencies • specialist care agencies • drug and alcohol services	Early intervention for FEP, e.g: Psychoeducation CBT Substance use work SGA medication Antidepressant agents or mood stabilisers Vocational rehabilitation
За	Incomplete remission from first episode of care	Late/incomplete recovery	Primary and specialist care services	Early intervention for FEP As for stage 2, but with additional emphasis on medical and psychosocial strategies to achieve remission

Clinical stage	Definition	Definition in the 'phase' model	Target populations for recruitment	Potential interventions
3b	Recurrence or relapse of psychotic disorder which stabilises with treatment, but at a level of GAF, residual symptoms, or neurocognition below the best level achieved following remission from first episode	Late/incomplete recovery	Primary and specialist care services	Early intervention for FEP As for stage 3a, but with additional emphasis on relapse prevention and 'early warning signs' strategies
3c	Multiple relapses, with objective worsening in clinical extent and impact of illness	Late/incomplete recovery	Specialist care services	Early intervention for FEP As for stage 3b, but with emphasis on long-term stabilisation
4	Severe, persistent OR unremitting illness as judged by symptoms, neurocognition and disability criteria	Chronicity	Specialist care services	As for stage 3c, but with emphasis on clozapine, other tertiary treatments, and social participation despite ongoing disability

CBT, cognitive-behavioural therapy; FEP, first episode psychosis; GAF, Global Assessment of Functioning scale; SGA, second-generation antipsychotic; SOFAS, Social and Occupational Functioning Assessment Scale.

Adapted from McGorry et al. 2006 [79].

Stage 0: the premorbid phase

The traditional approach to identifying individuals who are at risk of developing schizophrenia is to study family members of individuals already diagnosed with the disorder [80, 81]. This is known as the 'high-risk' approach. Assessments usually begin when subjects are children, with follow-up continuing over many years, with the aim of detecting the development of psychotic disorder at some stage in the person's life span. Researchers using the high-risk family history approach acknowledge that the transition rate to a psychotic disorder is not likely to be large and findings may well not be generalisable beyond the genetically defined high-risk group [80, 81]. Those who have an increased genetic risk may be at stage 0 of psychotic disorder, but given the lack of sensitivity of a solely genetic model of risk, they of course may not. Furthermore, intervention in these 'at-risk' individuals is neither practical nor ethical, as the degree of risk is low, those possibly 'at-risk' are not symptomatic, and the timing of onset of psychotic disorder not known. Indeed, studies into

genetic high-risk never claimed early intervention as a goal, focusing instead on investigating causal pathways into schizophrenia and other psychotic illnesses.

Mednick et al. [82] modified the genetic high-risk approach by focusing on adolescent offspring who were entering the peak age of risk (i.e., they added in the risk factor of age). This modification made the high-risk approach more practical. However, the number of people from this cohort who develop a psychotic disorder is still not expected to be large, and the number of false positives are too high to make any intervention practical.

Similarly, the Edinburgh High Risk Project [83-85] studies individuals with presumed high genetic liability for schizophrenia, including both first- and second-degree relatives of people with schizophrenia. Like the Mednick approach, this study recruits young adults (aged 16-25) who will pass through the period of maximum risk of developing schizophrenia during the planned 10 years of the study. Data reported in 2002 revealed that 13 out of 162 subjects (about 8%)

had developed schizophrenia to date, 6 years after study commencement [86]. Although this rate of onset of schizophrenia is well above the expected community rates, recruitment of large numbers is needed in order to clarify other risk factors for development of schizophrenia and to eventually identify a group for whom preventive treatment is justified.

Stages 1a and 1b: the possible prodrome

The 'prodromal' phase, or symptomatic 'atrisk mental state' is usually characterised by a sustained and clinically significant deviation from the premorbid level of experience and behaviour [71, 87, 88]. The clinical staging model conceives of two forms of this possible prodrome: a period of mild or nonspecific psychotic symptoms, and a period of increased symptom activity which still does not meet criteria for a psychotic episode.

Identifying the prodrome

The definition of 'at-risk' status (i.e., the mental state that is thought to place the individual at incipient or ultra high risk of developing a psychotic disorder) varies across research groups, and includes the 'psychosis proneness' research of Chapman and Chapman et al. [89-91], the basic symptoms method [92, 93], and the Ultra High Risk method [67, 94, 95]. Common to these groups is the idea that a constellation of identifiable difficulties emerge in the psychosis prodrome. This enables clinicians to implement strategies that may prevent, or delay the onset of psychosis. Examples of such difficulties are outlined in Table 5.

Table 5. Common problems of young people with an at-risk mental state

Neurotic symptoms	Anxiety Restlessness Anger, irritability
Mood-related symptoms	Depression Anhedonia Guilt Suicidal ideas Mood swings
Changes in volition	Apathy, loss of drive Boredom, loss of interest Fatigue, reduced energy
Cognitive changes	Disturbance of attention and concentration Preoccupation, daydreaming Thought blocking Reduced abstraction
Physical symptoms	Somatic complaints Loss of weight Poor appetite Sleep disturbance
Attenuated or subthreshold versions of psychotic symptoms	Perceptual abnormalities Suspiciousness Change in sense of self, others or the world
Other symptoms	Obsessive compulsive phenomena Dissociative phenomena Increased interpersonal sensitivity
Behavioural changes	Deterioration in role functioning Social withdrawal Impulsivity Odd behaviour Aggressive, disruptive behaviour

Adapted from Yung, Phillips and McGorry, 2004 [95].

Chapman et al. [89-91] attempted to identify individuals at risk of psychosis, or those they called 'hypothetically psychosis-prone', by focusing on attenuated and isolated psychotic symptoms. In addition to these 'positive' psychotic phenomena, they also theorised that people who displayed physical and social anhedonia and impulsive non-conformity were also at risk. Chapman et al. [91] also noted the need to focus on people at or near the age of greatest risk for schizophrenia, that is, late adolescence and early adulthood, and thus studied college students. A sample of college students with high levels of self-reported 'psychotic-like' symptoms were followed longitudinally over time and compared with a group of controls. At 10-15year follow-up, students who scored highly on scales of perceptual abnormalities and magical thinking were more likely to have developed a psychotic disorder than comparison subjects. Social anhedonia, physical anhedonia and impulsive non-conformity were not predictive of psychotic disorder at follow-up, although high scores on the Social Anhedonia scale correlated with high levels of psychotic-like experiences at follow-up. However, the actual number of students who developed a psychotic disorder after 10-15 years was low: 11 out of 375, or 2.9%. Students with subthreshold forms of delusions and hallucinations seemed to be more at risk of subsequent full-blown psychotic disorder than those without these symptoms. However, many students with high levels of magical thinking and perceptual abnormalities did not develop a psychotic disorder. To date, because of the low numbers developing a psychotic disorder, the high number of false positives and the long time frame of the follow-up, the psychosis-proneness research has not been able to be used as the basis for any preventive intervention.

The two other approaches – the basic symptoms and ultra high risk methods – focus on identifying people at risk of psychosis using clinical, rather than population, samples. The basic symptoms approach, used primarily in German-speaking countries, shares with the psychosis proneness approach a focus on symptoms as markers of risk. Basic symptoms are subjectively experienced abnormalities in the realms of cognition, attention, perception and movement. They have also been described as 'self-experienced neuropsychological deficits' [93]. Basic symptoms are assessed by the Bonn Scale for the Assessment of Basic

Symptoms (B-SABS [96]) and, more recently, the Schizophrenia Prediction Instrument, Adult version (SPI-A [97]). Basic symptoms in the absence of other symptoms would likely qualify an individual for stage 1a rather than stage 1b membership.

In contrast to genetic high-risk studies, which focus purely on genetic risk for psychosis, Bell [98] proposed a 'multiple gate screening' or 'close-in' approach of combining risk factors beyond symptoms (for example, genetic factors) to optimise prediction of those at high risk for disorder. Yung and McGorry, 1996 [71] describe the application of this model to define at-risk mental states for psychotic disorder. As noted earlier, most frequently occurring prodromal features are non-specific and could be the result of a number of conditions (e.g., major depression, substance abuse). Further, both attenuated and frank psychotic symptoms are relatively common in the general community. This model of identification of the at-risk group therefore requires the presence of a number of risk factors beyond symptoms or genetics alone (see Box 1). The primary 'state' criteria identified to date to define the at-risk group are age (falling with the peak age range of onset of psychotic disorder, i.e., adolescence and young adulthood), combined with either attenuated positive psychotic symptoms (i.e., positive symptoms that occur below psychotic threshold with respect to frequency and/or intensity), or a brief period of supra-threshold frank psychotic symptoms that resolve spontaneously. The criteria then invoke a 'trait' factor - presence of a first-degree relative with a psychotic illness. However, both this group and the 'mildly symptomatic' groups also superimpose an additional state factor of either functional decline or long-standing poor functioning. There is also an assumption that people who meet the criteria are help seeking or distressed by their symptoms, even if these symptoms are not those which qualify the individual as at ultra high risk. This, then, excludes people who have psychotic-like experiences but are functioning adequately with their symptoms. Those who meet these criteria would qualify for stage 1b membership.

Box 1. Criteria for identification of ultra high risk (UHR) or at-risk mental state

- Young people between 15 and 25 years of age.
- A change in subjective experience and behaviour in recent months or within the past five years (which may fluctuate but is progressive)

Plus either

 Subthreshold positive symptoms not severe or persistent enough to be regarded as evidence of sustained frank psychosis sufficient for a diagnosis of a psychotic disorder

or

 history of brief self-limited psychotic symptoms (frank psychotic symptoms that resolve within seven days)

or

 a genetic vulnerability, operationalised as either the presence of schizotypal disorder, or a first-degree relative with a history of any psychotic disorder

Plus

functional decline to caseness (≥ 30% drop at any time in the previous 12 months in scores on the Social and Occupational Functioning Assessment Scale (SOFAS) [99]) or longstanding poor functioning (SOFAS < 50 for previous 12 months)

The dominant method of assessing the at-risk mental state is through semi-structured interview, using the Comprehensive Assessment of At Risk Mental States (CAARMS) [100] or the Structured Interview for Prodromal States (SIPS) and related instruments [101, 102]. The CAARMS has two functions: to provide a comprehensive assessment of psychopathology thought to indicate imminent development of a first episode psychotic disorder; and to determine if an individual meets UHR status or has crossed the threshold for a psychotic disorder. It is a semi-structured interview which includes scales for assessing in detail threshold and subthreshold psychotic phenomena and other symptoms and signs which occur in the psychotic prodrome, including negative, dissociative and 'basic' symptoms. Its domains and subscales are outlined in Box 2. The CAARMS shows good to excellent reliability, and both overall scores and negative symptoms in particular are predictive of psychosis onset [100].

Box 2. CAARMS domains

1: Positive symptoms

- 1.1 Unusual thought content
- 1.2 Non-bizarre ideas
- 1.3 Perceptual abnormalities
- 1.4 Disorganised speech

2: Cognitive change attention/concentration

- 2.1 Subjective experience
- 2.2 Observed cognitive change

3: Emotional disturbance

- 3.1 Subjective emotional disturbance
- 3.2 Observed blunted affect
- 3.3 Observed inappropriate affect

4: Negative symptoms

- 4.1 Alogia
- 4.2 Avolition/apathy
- 4.3 Anhedonia

5: Behavioural change

- 5.1 Social isolation
- 5.2 Impaired role function
- 5.3 Disorganising/odd/stigmatising behaviour
- 5.4 Aggression/dangerous behaviour

6: Motor/physical changes

- 6.1 Subjective complaints of impaired motor functioning
- 6.2 Informant reported or observed changes in motor functioning
- 6.3 Subjective complaints of impaired bodily sensation
- 6.4 Subjective complaints of impaired autonomic functioning

7: General psychopathology

- 7.1 Mania
- 7.2 Depression
- 7.3 Suicidality and self harm
- 7.4 Mood swings/lability
- 7.5 Anxiety
- 7.6 Ocd symptoms
- 7.7 Dissociative symptoms
- 7.8 Impaired tolerance to normal stress

The 'clinical high risk' approach adds further criteria to the 'ultra high risk' method of identifying the prodrome by focusing not only on attenuated positive psychotic symptoms (the clinical high risk-positive group), but also on enduring specific combinations of cognitive, academic, and social impairments and disorganisation/odd behaviour which represent possible attenuated negative psychotic symptoms (the clinical high risk-negative group [103]). These two groups are proposed to characterise the progression of the prodrome, with the clinical high risk-negative group representing the earliest possible stage of identification of the prodrome (stage 1a membership), which may then progress into the 'late prodrome' clinical high risk-positive group identified by the CAARMS and the SIPS. Without effective preventive intervention, this group may develop 'schizophrenia-like psychosis' (full-blown psychotic symptoms of brief duration, not yet meeting criteria for schizophrenia), a group that those adopting the model of Cornblatt et al. [104] regard as still being within the prodrome, given their focus on prediction and prevention of schizophrenia rather than psychotic disorders more generally.

The degree to which these measures accurately identify the prodrome can only be retrospectively determined, by exploring the proportion of this 'at-risk', or putatively prodromal group who go on to develop psychosis. For this reason, stages 1a and 1b represent a possible prodrome. Figures 2 and 3 provide a graphical representation of the distinction between the prospective and retrospective identification of the prodrome. Figure 2 identifies the challenge of identifying the prodrome prospectively, given that the term 'prodrome' can only apply when there is certainty that the full-blown disorder has emerged. Figure 3 demonstrates the appropriate retrospective identification of a prodrome. Focusing on individuals with apparently prodromal symptoms and signs and identifying them as those likely to develop a psychotic disorder will lead to the problem of a large number of false positives: most people with these features would not make the transition to a full-blown psychotic disorder.

Rates of conversion to psychosis are influenced by inclusion criteria, the population sampled and the treatment provided. As such, transition to psychosis within 12 months of being initially deemed at-risk has varied considerably [106]. Initial studies applying the UHR criteria yielded transition rates of approximately 40% within 12-30 months of assessment [107]. However, there has been a steady decline in transition rates across continents and clinics in recent years, with a recent meta-analysis comprising 27 studies (n = 2502) reporting an overall transition rate of 22%, 12 months after assessment [108]. This reduction may be due to earlier detection and improved treatment strategies in young people at risk of psychosis [109]. Thus, the syndrome which seems like, or could be, a prodrome should not be thought of as a disease entity, but rather as a state risk factor for a full-blown psychotic disorder. That is, the presence of the syndrome implies that the affected person is at that time more likely to develop psychosis in the near future, than someone without the syndrome. Instead of being labelled as 'prodromal', the person should be thought of as having an 'at-risk mental state' (or 'at risk mental state for psychosis', ARMS-P) [67]. This terminology highlights the risk factor approach, suggesting that the syndrome is a risk factor for incipient onset of full-blown psychosis [67, 94, 95].

Figure 2. Prospective identification of a possible prodrome

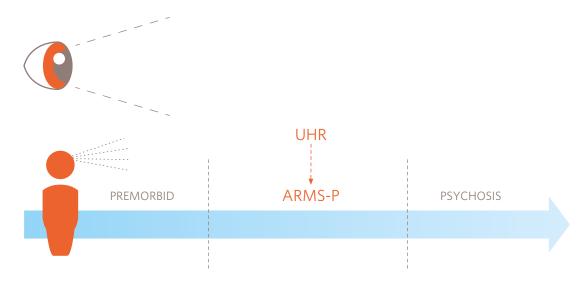
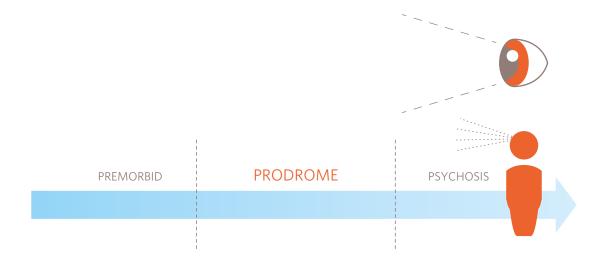


Figure 3. Retrospective identification of the prodrome



Potential advantages of identification and intervention at stages 1a and 1b include:

- identifying people during a phase in which subtle yet tenacious disability is possibly laid down. Much of the psychosocial disability observed in first episode psychosis is difficult to reverse in the absence of targeted interventions such as vocational recovery, even when the core symptoms remit with effective antipsychotic treatment (as they do in up to 90% of cases). Intervention in the pre-psychotic stages may prevent the entrenchment of such psychosocial disability
- facilitating engagement with services by managing current difficulties, before the person is too 'out of touch'. Engaging young people in
- this early phase of illness might facilitate more timely and effective treatment than among those with entrenched psychotic symptoms [95, 110]. Additionally, should progression to frank psychosis occur, this pre-existing engagement with mental health services may enhance medication compliance and engagement with outpatient care [110]
- reducing the severity of psychosis, and therefore the burden of trauma, stigma, acute or embarrassing behaviour, and the need for hospitalisation, by enabling early intervention if symptoms do progress
- potentially preventing or delaying transition to psychosis in a subset of people.

Preventive intervention strategies for the possible prodrome currently include early recognition and access to services through increasing the awareness of specific groups (e.g., parents, teachers, school counsellors, general practitioners (GPs) and health professionals). Most research, however, has centred on the more active and specific interventions of psychological therapies and medication trials in the at-risk group. Evidence from trials conducted in clinics in Australia, the US, UK and Europe demonstrates that specific interventions can ameliorate, delay and even prevent the onset of first episode psychosis in some people. These interventions have included cognitive-behavioural therapy (CBT) combined with a second-generation antipsychotic (SGA) [28], CBT alone [29, 111], or antipsychotics alone [27], and are outlined in more detail in Section 2.

There are, however, risks in attempting to identify, and intervene in, the pre-psychotic phase. These include:

- the 'false positive' scenario, where individuals are identified as at risk of developing a psychotic illness who were not in fact at risk. There is a potential risk of self-stigmatisation for those who do not develop a persistent psychotic illness [112-114]
- side effects of any intervention, particularly antipsychotic medication, used to treat psychotic symptoms during this stage; especially given these treatments may be unnecessary in the case of 'false positives'.

These concerns have led to a preference in some countries for 'naturalistic designs' over randomised trials of intervention (including the use of antipsychotics) in the at-risk group. This in turn, paradoxically, has led to widespread and uncontrolled use of off-label medication for which there is currently no evidence of efficacy in treating psychotic symptoms in the at-risk group and/or preventing transition to psychosis [15]. It must be emphasised that use of antipsychotics in the UHR group is not recommended. There are, however, a small number of situations in which the introduction of an antipsychotic in someone considered UHR may be justified. These situations are outlined in guideline 3.1.

Given the risks of intervention in the prepsychotic stages, and the limited (although consistent) research to date, more evidence is required before definitive recommendations regarding treatment in these stages can be made. The development of psychotic disorder from premorbid and prodromal mental states needs to be better understood. Further research is needed to determine which treatment strategies are effective in reducing symptoms and disability and the risk of progression to stage 2, acute onset of FEP. Such research must meet the highest ethical standards, and potential participants must give genuine informed consent and be free to withdraw from the research at any time. Non-participation in research must not affect access to appropriate clinical care. Finally, research should be led by local clinicians and researchers so that culturally normal experiences and behaviours are not misconstrued as signs and symptoms of illness.

Stage 2: the acute phase, recovery and the 'critical period'

Stage 2 encompasses the initial acute treatment phase and the early recovery phase of the first 3-6 months following the onset of psychosis [115].

The acute phase

The acute phase can be characterised by the presence of psychotic features such as delusions, hallucinations, and formal thought disorder. It is usually during this phase that someone first comes into contact with mental health services. An individual's presentation, which frequently includes symptoms of other comorbid conditions, will determine the setting in which they receive treatment and the urgency with which they are assessed.

Goals of treatment in the acute phase include resolution of positive psychotic symptoms, preventing or treating comorbid conditions and beginning psychosocial and functional recovery work

Recovery

The focus of management during the initial recovery phase is to help people who have experienced psychosis to understand the disorder and to develop skills that will enable them to achieve their goals in the future.

Predictors of short-term (2–5 year) recovery in first episode psychosis include:

- earlier intervention/shorter DUP [17, 19, 20, 116-120]
- female sex [121-123]
- older age at onset [124, 125]

- better premorbid functioning [117, 119, 120, 126]
- severity of psychopathology, particularly negative symptoms [119, 127-129]
- a subjective sense of hope [130]
- absence of substance use [131-133]
- adherence to treatment [119, 134]
- social and family contacts [130, 135].

Some of these factors are more clearly malleable than others, with DUP, adherence to treatment, comorbid substance use, and a subjective sense of hope being the clearest malleable factors. A goal of treatments during stage 2 is not only to manage current symptoms, disability, and distress, but also to prevent further deterioration and progression to stage 3 or stage 4.

Stage 3: late/incomplete recovery, relapse with poor outcome, and the 'critical period'.

In contrast to Kraepelin's model of progressive psychopathology in the psychoses, Bleuler [136] noted that psychopathology and disability emerged rapidly early in the course of illness, plateauing thereafter. This suggests a relatively brief, active phase of deterioration, with a subsequent level of diminished functioning that stays stable for some years [137]. This has been coined the 'critical period' [138], a period of up to 5 years after the onset of psychosis, after which the level of functioning attained endures for the long term. Intervening during this phase of aggressive deterioration post-onset of acute psychotic symptoms may halt its progression and hence reduce the likelihood of incomplete recovery. Interventions may include providing effective treatment of psychotic symptoms and associated sequelae in as timely a fashion as possible throughout this 5-year period (i.e., by reducing DUP, preventing relapse, and managing psychosocial and psychological comorbidities of psychosis). Stage 3 includes this 'critical period' phase.

Early evidence backed up Bleuler's proposal [139-141], although there has been more recent suggestions that the critical period should include the prodrome [142, 143]. The implication of the critical period is that intervention provided during late/incomplete recovery may not only halt deterioration and improve functioning in the short term, but be a positive prognostic factor into the medium and long term.

Late or incomplete recovery is generally defined by the persistence of positive symptoms. However, it is likely to be better operationalised in a multidimensional manner that focuses on key predictors of disability, such as symptom domains, behaviour, function, suicidality, and ability to work. Other factors that may be markers of incomplete recovery include ongoing negative symptoms, depression and anxiety, social deficits (especially difficulties in age-appropriate social and vocational functioning), and cognitive deficits. Incomplete recovery can be identified as early as three months after the onset of the acute episode [115].

The staging model envisages three forms of incomplete recovery – one in which premorbid levels of functioning or symptom status are not reached after onset of FEP; another where premorbid levels of functioning or symptom status are initially reached in recovery from FEP, but subsequent relapse leads to less positive outcomes; and a third in which multiple relapses occur with associated ongoing deterioration. These forms of incomplete recovery can be distinguished from stage 4, in which no significant recovery seems to have taken place and symptoms or functioning appear to have progressed into a chronic course of illness.

Stage 3a: incomplete recovery without relapse

Addington et al. [115] identify factors relevant in establishing and perpetuating incomplete recovery in psychosis, as listed in Table 6. Intervening during this phase requires targeting those factors that are potentially modifiable, including treating comorbidity, providing appropriate psychosocial services (such as vocational rehabilitation), facilitating psychological adjustment to psychosis, and enhancing adherence. The possibility of treatment-resistant illness can be entertained after these avenues have been exhausted. Between 10 and 50% of people with FEP experience treatment resistance [144-146]. Treatment during stage 3a focuses on marshalling additional pharmacological and psychotherapeutic strategies to manage the potentially modifiable factors outlined in Table 6 and hence achieve full remission.

Table 6. Factors relevant to establishing and perpetuating incomplete recovery in psychosis

Domain	Unmodifiable factors	Potentially modifiable factors
Factors related to the person being treated	Poor prognosis factors: males, single, intellectual disability Diagnosis of schizophrenia	Comorbidity: substance-use disorders, depression Psychological adjustment: sealing over versus integration recovery style Psychosocial milieu, including family
Factors related to the illness	Poor premorbid adjustment Marked cognitive impairment Early and/or insidious onset Longer duration of prodrome, delays in treatment initiation, and/or longer duration of untreated psychosis Organic factors: abnormal brain features, indicated by computed tomography, magnetic resonance imaging, baseline abnormal electroencephalograph; poor integrity of the dorsolateral prefrontal cortex	Severity of psychopathology Negative symptoms at first admission +/- poor functioning Unawareness of negative symptoms Poor cognitive function at stabilisation
Factors related to treatment	Pharmacokinetics: incorrect dose, drug-drug interactions, bioavailability problems, therapeutic windows	Impaired adherence: psychosocial treatments, medical treatments Inadequate rehabilitation program or lack of services and resources Side effects (e.g., extrapyramidal symptoms, metabolic, cognitive)

From Addington et al. [115], based in part on Pantelis and Lambert [147].

Stages 3b and 3c: single or multiple relapse with poor outcome

Ninety percent of people with FEP experience full or partial remission of positive psychotic symptoms within 12 months of treatment commencement [148]. Relapse is, however, common – naturalistic studies suggest 70–82% of people with FEP relapse within 5 years [149-151]. Each relapse increases the risk of persistent, particularly negative, symptoms developing

[146], as well as other challenges inherent in the 're-recovery' process, such as post-psychotic depression and suicide [152, 153] and broader psychosocial complications such as disruptions to vocational, educational, and social networks [154]. Relapse can also increase burden for family members and carers [155].

Risk factors for relapse in many ways mirror those for onset, and are outlined in Table 7.

Table 7. Summary of risk factors for psychotic relapse following FEP

Domain	Risk factor
Factors related to the individual	Poorer premorbid adjustment Antisocial personality (positive); agreeableness (negative) Cannabis use Non-adherence to medication
	Cognitive flexibility (negative)
Factors related to the environment	Stressful life events Expressed emotion

Adapted from The recognition and management of early psychosis: a preventive approach, 2nd Edition, Henry J. Jackson, Patrick D. McGorry, Editors. 2009, Cambridge University Press: Cambridge P 352.[156]

Treatment in stages 3b and 3c focuses on ongoing relapse prevention, continuing pharmacological and psychosocial interventions for long-term stabilisation, and intervening in functional domains such as vocational recovery to prevent disability.

Stage 4: prolonged/treatment refractory illness

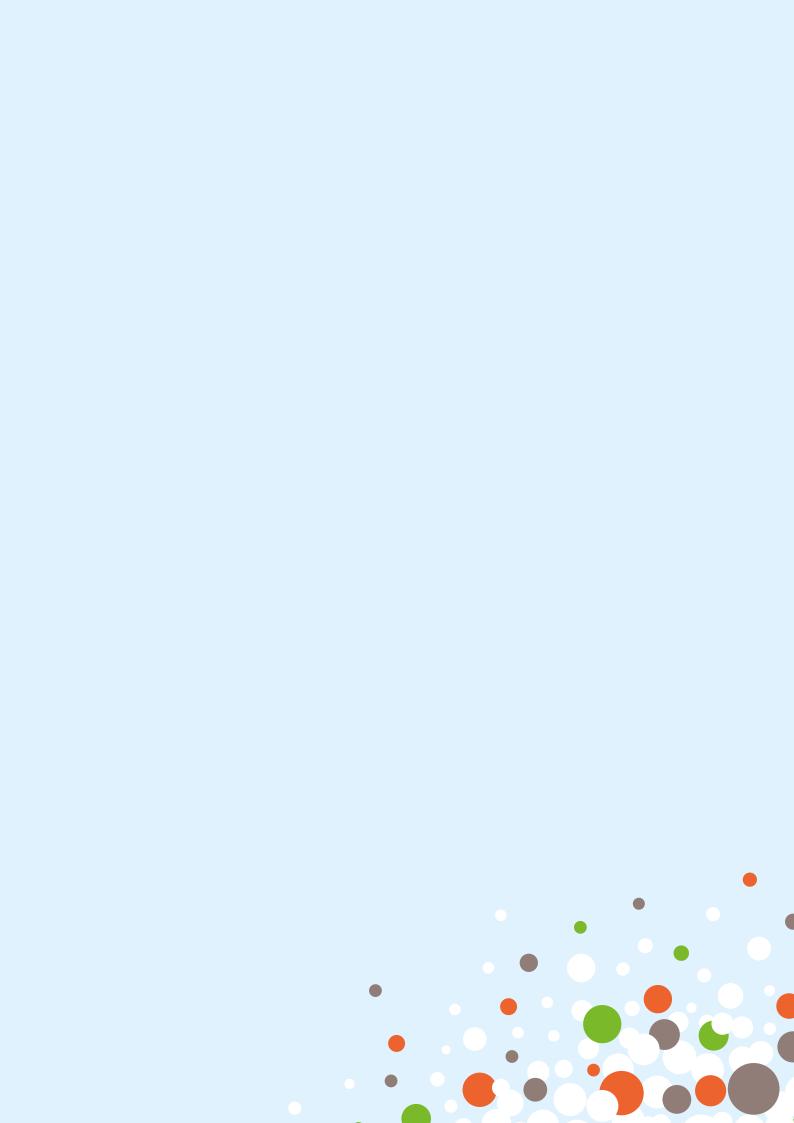
Individuals may enter stage 4 at first presentation (i.e., from stage 2) by meeting the specific clinical and functional criteria of this stage, as reflected in symptoms, neurocognition, and disability criteria. They could also progress to stage 4 by failure to respond to treatment, as indicated in stage 3a.

Even in the presence of ongoing disability, health and good quality of life can emerge. The primary issues during this stage of psychosis include managing the illness itself, its physical and mental sequelae, and psychosocial correlates such as strained relationships with family members, social isolation, and unemployment [157]. Clinical strategies include continuing relapse prevention and psychological treatment for the consequences of persistent illness, such as demoralisation, depression and suicide. Contrary to the therapeutic nihilism often seen at this stage, some interventions may be of benefit, including clozapine and CBT.

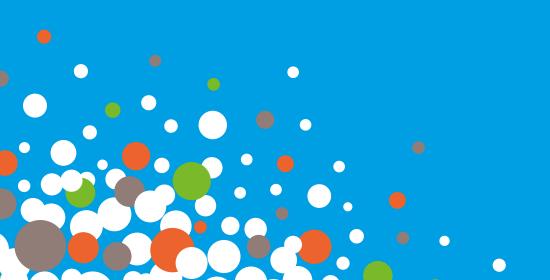
General medical care also becomes a priority at this stage, given the high physical morbidity and premature mortality in this group, as in many highly disadvantaged groups in society [158, 159]. This period may also include revisiting the degree to which medication side effects outweigh benefits, given the medical and social consequences of some medications, including obesity, lipid abnormalities, cardiac abnormalities and impaired glucose tolerance. The preventive focus in stage 4 therefore includes prevention of mortality.

Summary

The application of the clinical staging model to psychiatry is in its early phases. Given this, these guidelines by and large use more familiar concepts, such as putative prodrome/acute onset/recovery/relapse/problematic recovery. However, the staging model shows significant promise in providing a heuristic around which timely and effective interventions in psychiatric illness can be understood and delivered.



Section 2. **Clinical practice guidelines**



Section 2. **Clinical practice guidelines**

The previous section serves as background and rationale to the clinical practice guidelines themselves, which provide principles (and the evidence for these) for the care of people with early psychosis. Regardless of stage of illness, some elements of care for those with psychosis are universal. These include timely access to care and a comprehensive assessment processes. Guidelines 1 and 2 outline recommendations relevant to access and assessment in the preonset and FEP domains. Guideline 3, 'Treatment', covers principles specific to particular phases of illness, as well as those that apply generally to the treatment of people with early psychosis.

Guideline 1. Access

Background

The importance of DUP in FEP has been established following the publication of three systematic reviews [17, 20, 160]. These reviews indicate that longer DUP is both a marker and an independent risk factor for poor outcome. The Scandinavian Early Treatment and Identification of Psychosis - or TIPS study [161] - is a Norwegian study that has demonstrated that reducing DUP leads to both early and sustained benefits in reducing the severity of illness and improving social functioning [162]. Comparing two regions with an early psychosis detection program to two areas without, this study found that DUP could be substantially reduced via community education and the use of mobile detection teams [19]. The early detection program included targeted campaigns for GPs, social workers, and school welfare workers, as well as provision of information from the early detection teams. Patients who subsequently entered care in the early detection sectors were also in better clinical condition and at less risk of suicide [18, 191. These positive clinical differences were

maintained at 3-month follow up, and at 1 year, the level of negative psychotic symptoms was significantly less in the early detected sample [163]. While replication studies in other countries will be valuable to confirm the evidence for early detection, the Norwegian research program makes a compelling case for establishing early detection and engagement strategies to reduce treatment delays.

The two key components of intervention for reducing DUP, as demonstrated by the TIPS study, are community awareness and mobile detection services. When both are in place, it is possible to achieve very low levels of DUP (a median of only a few weeks). These strategies also result in a less traumatic or 'crisis-driven' mode of entry into care and enable people to be engaged without a surge of florid psychotic symptoms or disturbed behaviour being necessary in order to gain entry into service systems.

The relationship between DUP and outcome is robust, and has been demonstrated over long follow-up periods (e.g., 8 years [168] and 15 years [169]). However, these studies show that, although it is a malleable risk factor, DUP accounts for a relatively modest amount of outcome variance, suggesting the importance of treatment access and quality during the early stages of illness.

A critical implication of the DUP literature is that better outcomes will result from earlier detection and treatment of psychotic disorder. Despite the severity of frank psychosis, the mean time between onset of symptoms and treatment is generally in the range of 1–2 years, with median values being around 4–6 months and including delays of 15 years or more [164]. Even those who seek help (and many may do so even prior to the onset of psychotic symptoms [87, 165]) may not do so for psychotic symptoms, but rather nonspecific symptoms such as depression,

anxiety, or concerns about decline in functioning [166], making it particularly important that clinicians be skilled in identifying signs of early psychotic disorder (see Box 3 for what may constitute timely access to care). Additionally, regardless of the impact of DUP on outcome, ease of access to care is important because it provides relief from the distress that psychotic and non-psychotic symptoms can cause [32].

Box 3. Service principles to facilitate timely access to care

- Assessment occurs within 48 hours of referral to a service
- Consultant psychiatrist review occurs within 1 week of service entry
- A case manager is assigned within 5 days of assessment

Norman and Malla [164] outline that delays in accessing appropriate care may be influenced by two distinct factors: the period of time between onset of symptoms and seeking help from a professional health provider; and the time between this help seeking and the commencement of appropriate treatment. Table 8 outlines different sources of delay and interventions that may affect these. It is difficult to disentangle the relative effectiveness of these strategies to reduce DUP by promoting help seeking and accurate identification of early psychosis, as in most studies a number of interventions have been combined. Communitywide initiatives to increase knowledge and reduce stigma associated with psychosis appear to be effective in reducing delay in help seeking [19, 167-170]. Training primary care practitioners (such as GPs) has also demonstrated some success in reducing DUP, although data is less consistent [161, 168, 169, 171, 172].

Table 8. Sources of delay in accessing services, correlates, and ways to manage these

Stage of possible delay	Help seeking by patient and/or family	Identification of psychotic symptoms by generic services	Connection to appropriate services	Commencement of treatment
Influenced by	Stigma [173] Nature and extent of social network Nature of onset: precipitous/ insidious; characterised by negative symptoms [174] Younger age [174]	Training of provider to whom first presents (36-43% of the time, this will be a GP [164]; see also Bechard-Evans et al., 2007 [174]) Age at onset	Presence of early detection teams [161]	Patient insight and engagement with services Practitioner awareness of nature of appropriate treatment, importance of prompt treatment, and methods of effectively engaging patients
Intervention	Mental health literacy e.g., mental health first aid for general public	Training service providers (e.g., support agencies, schools, GPs, emergency departments[161, 166]) to recognise psychotic symptoms	Implementation of early detection teams	
	Some evidence that the combined may be effect DUP [169]			
	Some evidence that the effective in reducing DU with very long DUP [17			

Recommendations

- **1.1** Mental health services should be accessible and provide a timely assessment for people experiencing their first episode of psychosis. GPP
- 1.2 Enhancing help seeking:
- 1.2.1 Mental health services should provide education about early intervention to families and the wider community. The community needs to be well informed about psychotic disorders and how to obtain effective help. Community-wide initiatives to increase knowledge and reduce the stigma associated with psychosis should be implemented.^C
- **1.3** Enhance professional identification of psychotic symptoms:
- 1.3.1 Primary health care professionals should be competent in eliciting and recognising the early clinical features of psychotic disorders. GPP
- **1.3.2** Primary care professionals should be trained in identifying psychosis and given information about how to refer to specialist services.^C

- 1.3.3 Undergraduate and postgraduate medical education should be developed to allow for better training in assessment and treatment of emerging mental illness. GPP
- 1.3.4 Close links should be developed between primary and specialist mental health services to facilitate assessment and treatment of emerging mental illness. GPP
- **1.4** Enhance connection to appropriate services:
- **1.4.1** Specialist early detection teams should be set up to enable timely access to care.^C
- 1.4.2 The means to access the service and the hours of operation should be promoted and advertised to the community. GPP
- 1.4.3 The mental health service should be accessible 24 hours/day, 7 days/week. GPP
- 1.4.4 The service should accept potential new referrals from a wide range of individuals, family and friends, and primary care services. A low threshold for expert assessment should be set for any person suspected of developing a psychotic disorder for the first time. GPP

Guideline 2. Assessment

Background

The purposes of assessment include engaging the young person and enabling the development of a therapeutic alliance; and gaining information to enable diagnosis and formulation of the person's difficulties, including understanding personal context. These factors both inform treatment planning and are a vital foundation for further successful treatment. Although it is placed in its own section in these guidelines, it is clear that assessment must be an ongoing process. In practice, assessment and treatment often merge [175]. Good assessment can not only enable treatment but can be a form of early treatment in its own right.

Rapport and the timing of assessment

Assessment procedures for people experiencing FEP should incorporate strategies to promote engagement [176]. First contact with mental health services is likely to occur in the context of crisis or personal disaster for young people and/or their families [177], with some possible trauma involved in referral to mental health services [178]. Therefore, although it is important that an assessment thoroughly cover the domains detailed below, this should not occur at the expense of the developing therapeutic relationship. A range of factors may increase the likelihood of the first contact serving as a solid foundation for ongoing rapport, including:

- well-trained and experienced staff
- an individually adapted interview situation (calm, friendly, safe, and sufficient time)
- consistency of care throughout assessment and into treatment as far as possible
- an appropriate interview technique (listening carefully, taking the individual's concerns seriously, dispelling their fears, establishing trust, trying to identify common ground, optimistic and supportive atmosphere, using open-ended questions where possible. see Power & McGorry [175]).

Reducing DUP requires not only enabling access to mental health services, but initiating treatment as soon as possible. This suggests that assessment should occur as quickly as practicable, for both the UHR and FEP groups, but particularly the latter.

Domains of psychiatric assessment in early psychosis

Clinical and personal history

The personal context of illness is a useful place to start an assessment. By focusing initially on understanding the experience of the young person being assessed and his or her family, a context is provided for signs and symptoms, and engagement is enhanced. As noted in Power & McGorry [175], important questions to answer in establishing this context include:

- How, and how rapidly, did the psychosis and prodrome evolve?
- To what degree are symptoms ego-syntonic or attributed to something other than illness?
- Who is being affected by psychosis and how are they coping with it?
- What is the young person's premorbid personality structure, self-concept, and phase of development?
- What are his/her coping and problem-solving skills, current conflicts, social strengths and resources, including issues such as accommodation, financial issues, occupation, and cultural factors?
- How do these influence how the young person is relating to his or her symptoms?
- What family supports exist and how does the family respond to illness?

Mental state examination

Following (and during) the taking of a clinical and personal history, assessment of signs and symptoms, via a mental state examination, including assessment of the presence, severity, and duration of difficulties, can occur. Insight is particularly important and should also be assessed, bearing in mind that it has both a state and trait component and may be culturally specific [179-182]. Elements of insight to assess include whether the person recognises that they have an illness, that the illness is a mental disorder, and that treatment is required. This assessment is aided by having a neuroleptic-free assessment period [175]. Where practicable, a 48-hour antipsychotic-free observation period is recommended prior to commencing antipsychotic medication to confirm the diagnosis of psychosis and exclude organic causes [183-185].

Biological assessment

Although only 3% of FEP has an organic origin, the initial assessment is the most appropriate time for this to be examined [186]. Biological examination can also serve other useful purposes, including:

- · detection of medical comorbidities
- identification of risk factors for future medical disorders
- identification of risk factors for incomplete remission or treatment resistance
- identification of a baseline against which pharmacological complications and side effects can be assessed [187].

Biological assessment in UHR has received less attention. There is no consistent standard battery of physical tests employed by UHR clinics worldwide. Often assessment of biomedical problems begins in earnest when an individual makes a 'transition' to a frank psychotic disorder. However, screening for the following would be advisable in this population:

- underlying pathology that may be responsible for the psychotic or psychiatric phenomenon
- general medical morbidity
- a medical baseline for those starting psychotropic medications.

For these reasons, good practice suggests a general medical assessment in the UHR phase that mirrors that in FEP (see Box 4). However, one should bear in mind that the possibility of medical problems unrelated, incidental or not causative of psychotic phenomena might be higher in this population.

Box 4. Recommendations for biological assessments in early psychosis

The following are recommended for all people admitted to an early psychosis service (UHR and FEP)

Physical status

- Neurological examination
- Weight, waist circumference, waist/hip ratio and BMI

Vital signs

• Blood pressure, pulse, temperature

Medical history

- Family history, notably of cardiac or lipid abnormalities and diabetes
- Smoking history
- History of alcohol and other drug use
- Physical activity levels
- · Menstrual history and possibility of pregnancy
- ECG (if cardiac risk)

Laboratory tests

- Haematology
- Electrolytes, including calcium
- Liver function test
- Renal function (blood, urea, nitrogen:creatinine ratio)
- Erythrocyte sedimentation rate (ESR)
- Antinuclear antibodies (ANA)
- Fasting glucose
- · Lipid profile
- Prolactin level
- Consider hepatitis C if risk factors present
- Urine drug screen

The following are recommended only for those young people with suspected FEP.

Laboratory tests

- Tests for other treatable disorders
- Thyroid function tests (basal thyroid-stimulating hormone, total and free trilodothyronine/ thyroxine)
- Serum copper and ceruloplasmin for Wilson's disease
- Fluorescent treponemal antibody absorbed (FTA-ABS) for neurosyphilis
- Vitamin B12/folate
- HIV

Neuroimaging

MRI

Other Tests

Expand aetiological search if indicated, for example:

- EEG, chest x-ray, lumbar puncture, karyotyping, heavy metal testing
- Expand medical monitoring if indicated (e.g., eye exam if risk factors for cataracts)

Adapted from Freudenreich et al.[186]

Cognitive assessment

Cognitive deficits are present at the first episode and show little alteration thereafter [188, 189]. They also seem to predate onset [190], with UHR groups generally demonstrating neuropsychological impairment [191-194], sometimes despite normal intelligence [192, 195], although generally to a lesser extent than FEP and established schizophrenia samples [192, 193]. Cognitive deficits predict functional outcome in FEP, and may be linked to other clinical variables such as insight, medication adherence, substance use and likely participation in therapy [196-198].

Social cognition (the way that people think about themselves and others) has been demonstrated to be poorer in schizophrenia than control groups (for a review, see Couture et al., 2006 [199]) FEP (e.g., Edwards et al., 2001 [200]), first episode schizophrenia [201], and people at risk of developing psychosis [202-204]. Social cognitive deficits also seem particularly related to psychosocial functioning in first episode schizophrenia [201].

Cognitive assessment can therefore allow interventions, particularly psychological interventions, to be appropriately tailored to each person's cognitive function; for example, by taking cognitive deficits into account in the delivery of therapy (such as poor working memory), or making cognitive deficits a focus of intervention (e.g., emotion recognition).

Assessment of comorbid disorders: substance use

Assessing substance use enables clinicians to implement interventions that improve a person's outcome and accurately identify their prognosis. Levels of substance use in the UHR group range from 7 to 40% [205-210]. Although substance use typically precedes psychosis onset, the direction of any causal relationship between the two remains unclear. One possibility is that the onset of psychosis is due solely to substance abuse [211]. Alternatively, the onset of symptoms may lead to the use of alcohol or drugs to modify distressing symptoms [206]. Cannabis use specifically is likely to be a contributing factor to psychosis onset [212, 213], especially in those with other vulnerabilities, such as functional polymorphism of particular genes [48, 214]. Substance use may also result in delays in

accessing treatment for psychosis because symptoms are mistakenly attributed to substance use.

Substance misuse is common in FEP. Individuals with FEP have significantly higher levels of substance misuse than non-psychotic peers [215], with most studies in Australia suggesting 60-70% of people with FEP report substance misuse at some stage in their life prior to presentation. Cannabis and alcohol are the most frequently misused substances [133, 216], with use of opioids, cocaine, inhalants, and sedatives being relatively rare. As well as being related to onset in the UHR group, substance misuse, particularly cannabis use, is also a frequently identified poor prognostic factor in FEP, including more severe positive psychotic symptoms [133, 217], disengagement with services [218, 219], increased rates of relapse in positive symptoms [133, 220], increased rate of inpatient admission [133, 217] and suicidal ideation and behaviour [221]. For further discussion of alcohol and tobacco use in this population, see Guideline 3.3.2, 'Physical health', on page 76.

Assessment of other psychiatric disorders

Other psychiatric disorders are common in both the UHR and first-episode phases. In a study by Phillips et al. [222], 87% of their UHR sample met criteria for at least one Axis I disorder, with the most common being major depression. Myles-Worsley et al. [223] suggest that depression is a key component of the psychotic prodrome, reporting that 84% of their sample reported 'abnormal' depressive symptoms, and that positive and depressive symptoms build in parallel to onset. Similarly, Yung et al. [224] suggest that low mood increases the likelihood that psychotic like experiences will develop into psychotic disorder, and that treating depressive symptoms may prevent onset of psychosis (see also Cornblatt et al. [225]). Svirskis et al. [226] noted that mood and anxiety disorders are particularly common in the UHR group, with higher levels of psychotic symptomatology associated with more Axis I diagnoses. More broadly, Woods et al. [227] reported that comorbidities were common in their UHR sample, with 69% having one or more mood/anxiety diagnoses, and 44% with one or more Axis II diagnoses. Other psychiatric disorders are also seen in approximately half of

people with FEP [228-231] and schizophrenia [232], and may be associated with poorer symptomatic and functional outcome [233-236]. Given that comorbid psychiatric disorders are associated with onset of psychosis in the UHR group and poorer outcome in the FEP group, assessment and treatment of these disorders is vital.

Risk assessment

Identifying whether there is significant risk of adverse outcomes is likely to enhance attempts to prevent them. Although the most commonly canvassed risk is that of suicide, other risks that can affect mortality and morbidity include risk of violence, neglect and victimisation, and non-adherence to treatment or service disengagement.

Risk of suicide

The 1- to 2-year incidence rates for suicide range from 0.3% to 2.9% in the FEP population [237-239]. Two studies have reported suicide rates over a longer follow-up period: Clarke et al. [240] report a 4-year incidence rate of 3%, whist Bertelsen and colleagues [241] report a 5-year rate of approximately 1%. Suicide attempt is more common and is the single greatest predictor of future suicide [238]. Between 10% and 25% of people with FEP report either deliberate selfharm or a suicide attempt prior to presentation for treatment [237, 238], and 50-65% will have experienced recent thoughts of suicide [238-240, 242, 243]. Rates remain high following the commencement of treatment. One-year prevalence rates of suicide attempt range from 2.9% to 11% [237-239]. Longer term follow-up studies have reported a 2-year prevalence rate of 11.3% [221] and a 4-year prevalence rate of 18.2% [240].

There is considerably less information available on rates of suicide, suicidal ideation, suicide attempt, and deliberate self-harm in the UHR group. Data suggests that 25–92% of people identified as UHR experience suicidal ideation [244], and 10–24% have attempted suicide prior to identification [244, 245], with no difference in rates of suicide attempt between the UHR and FEP groups. Yung and McGorry [87] found that 14.3% of their small UHR sample reported a history of deliberate self-harm, while in a larger study Phillips et al. [222] found that 64.8% of their UHR sample reported at least one incident of deliberate self-harm in their lives.

Risk factors: Risk factors for suicide and suicide attempt in psychosis include being younger, male, single, having experienced a recent loss event and having high levels of premorbid functioning plus anxiety regarding current mental deterioration [153, 246-248]. Greater insight, longer DUP and substance misuse have also been cited as risk factors, along with depression and hopelessness [249, 250], yet depression is often under-diagnosed, possibly due to a focus on psychotic symptoms which may mask depressive features [251]. Poor adherence to treatment has been shown to be associated with risk, in particular with regard to failure to attend follow-up appointments and poor medication compliance [246]. Suicide risk may be reduced in the presence of psychotic features and negative symptoms [238, 252]; however, there is debate in the literature about this [246], and a small number of people experiencing psychosis commit suicide in response to command hallucinations [253]. In the only UHR study to date, a family history of psychiatric illness and problematic substance use predicted suicide attempts [245].

Known periods of risk include the early stages of illness, often following an acute psychotic episode [175, 243, 248] and during the post-psychotic early recovery phase [250]. This may reflect the distinction between the initial influence of psychotic features on self-harm behaviours, which may then be followed by a more prolonged rise in suicidality in response to the struggles of the recovery process [254], as well as developing insight, hopelessness and depression, which are associated with suicidal ideation and suicide attempt [255-257]. The period immediately following discharge from hospital is also known to be a period where risk is elevated [258, 259], as is the time of transition from prodrome to psychosis, and the occurrence of a relapse [175] Suicidality can change rapidly. A system of routine assessment of suicide risk, including suicidal ideation and the presence or absence of known risk factors, is likely to reduce such risk. See Box 5 for indicated suicide risk assessment periods.

Box 5. Periods where suicide risk assessment is particularly indicated and recommended service responses

Transition from prodrome to psychosis Early phase of recovery

Early relapse

During rapid fluctuations of mental state
Prior to granting hospital leave
On discharge from the service
Following any incident of deliberate self-ham
Following loss events

Recommended service responses when someone is identified as high risk

- Informing consultant psychiatrist
- Discussing with clinical supervisor
- Development and documentation of immediate risk management plan in conjunction with the individual, carers, consultant psychiatrist, and other members of the treating team

Risk of violence

The majority of people with severe mental illness are not violent. Nonetheless, there is an established association between schizophrenia and increased rates of violence and criminal offending [260]. For example, compared with the general population, individuals with schizophrenia are 4 times more likely to have been convicted of a violent offence and 10 times more likely to have been convicted of homicide [261]. These rates increase substantially when substance abuse, personality disorder and social disadvantage are included. A systematic review and meta-analysis [262] reported that the pooled estimates of the proportion of participants with FEP committing any violence, serious violence and severe violence were 34.5%, 16.6% and 0.6%, respectively. There is a significant association between DUP and homicide, such that people who experience a longer period of untreated illness are more likely to have committed homicide [263]. As early intervention reduces the delay in treating mental illness, it has been suggested that this approach may be critical to reducing forensic outcomes such as violence [263].

Given the association that exists between psychosis – particularly early psychosis – and offending, assessment of the risk of harm or violence to others should be regarded as part of the comprehensive package of routine clinical care in early psychosis services. Where there are concerns regarding someone's potential risk of violence or offending, structured clinical assessment using tools, such as the HCR-20 [264] are recommended, rather than unstructured clinical interview. This is due to greater accuracy of structured risk assessment, and its facilitation of transparency in guiding decision making, which may be especially relevant in the event of external scrutiny [265]. Structured clinical assessment tools such as the HCR-20 assess both static (unchanging) and dynamic (modifiable) risk factors for violence. These tools provide guidance as to a person's level of risk (e.g., low, moderate or high), but more importantly provide opportunities for interventions to manage relevant dynamic risk factors, such as active symptoms, substance abuse, medication non-compliance, or lack of personal support. Assessing the risk of violence (or any risk) is futile if identified risks are not managed.

For a thorough discussion of violence risk assessment and management in mental health, see Maden [265].

Risk of neglect and victimisation

A history of neglect and victimisation is related to psychotic disorder, both cross-sectionally [266], and in predicting onset in people identified as UHR [267, 268]. A recent study suggested that 34% of people with FEP have experienced sexual or physical abuse [269]; another study reported that 30% of people with FEP experienced child sexual abuse and another 14% experienced physical abuse [270]. In psychosis broadly, the British National Survey of Psychiatric Morbidity found that victimisation in almost all its forms (i.e., sexual abuse, bullying, being taken into care, experiencing violence in the home, running away from home, spending time in a children's institution, being homeless, being a victim of serious injury, or experiencing violence at work) was more frequent in people with psychosis than those with other psychiatric disorders and the general population [271]. A recent systematic review found that criminal victimisation was up to 140 times greater among people with psychosis than the general population [272]. Recent studies suggested that 16-25% of people with schizophrenia are reported to be victims of violence at some time in their lives [273, 274].

Men with schizophrenia have an increased risk of dying by homicide than the general population, especially when involved in alcohol and drug use [275]. Rates of sexual and physical abuse in women with serious mental illness are twice those for women in the general population [276-278]. This history of neglect and victimisation may influence the way psychosis presents [270]; for example, Thompson et al. [279] found that people identified as UHR who had experienced sexual trauma were more likely to report attenuated psychotic symptoms with sexual overtones.

A number of factors could be responsible for these links: psychosis may cause neglect and victimisation; neglect and victimisation may cause psychosis; or some third variable may be responsible for both psychosis and neglect and victimisation. There is limited data to suggest the first option, although some authors (e.g., Goodman et al.[277]) suggest that cognitive and behavioural symptoms of schizophrenia, such as impaired judgement, planning difficulties, and difficulties with social relationships, result in greater vulnerability to abuse. There are also instances in which treatment for psychosis becomes associated with neglect and abuse (such as abuse on psychiatric inpatient units, [280]). latrogenic neglect may also occur if clinicians are not assiduous in detecting and treating comorbid physical conditions that can affect mortality, such as HIV and pulmonary illness [281]. Maltreatment may lead to psychotic disorder. On the other hand, other factors (such as premorbid cognitive deficits or problems with interpersonal functioning, with associated poor social supports and disadvantage such as homelessness) may be associated with both psychosis and risk of maltreatment [271].

Risk of non-adherence to treatment and service disengagement

The risk of non-adherence and service disengagement may be substantially greater in FEP than in more chronic samples [149, 282], reflecting a normative denial process [175] as well as other factors that contribute to non-adherence in more chronic samples, such as substance use and poor therapeutic alliance [283, 284]. Particular risk factors for disengagement from FEP services include past forensic history, lower severity of illness at baseline, living without family at discharge, and persistence of substance use throughout treatment [218, 285]. A protective

factor identified in psychosis broadly is a good relationships with clinicians [286].

Summary

Risk assessment includes suicide risk assessment, but also a broad range of other risks, including violence, neglect/victimisation, and disengagement from treatment. All should be assessed on a regular basis, to ensure treatment is appropriate to the individual's needs and to prevent clinical collusion in any ongoing risk the individual experiences.

Use of informants during assessment

During the assessment process, as much information as possible should be gathered from referring sources and other key people in the individual's network. This not only assists in gaining an understanding about how best to conduct an assessment and engage the individual, but also provides some preliminary information about their difficulties. However, accessing services may be anxiety-provoking and possibly traumatic for the individual's social network, as well as for the individual themselves. Engagement with families and other relevant social networks should be a priority at this time, not only for their own sake but as partners in care [175].

An assessment should therefore consider the immediate needs of the family and address:

- family members' understanding of psychosis, its treatment and prognosis
- the family's previous experience with psychosis, and their explanatory model(s) of the psychosis
- the practical, cognitive and emotional impact of the psychosis on individual family members
- the family's strengths and coping resources, including members' perceptions of their strengths and coping resources
- the family's experience in dealing with stress
- the family's appraisal of the resources available to support them
- the patterns of communication within the family (how the family relates to and communicates with the person with the illness) [175].

In some instances, however, people may be reluctant to allow communication between services and their family. An early step is to explain that the involvement of families is routine and a useful part of someone's overall care. If an individual continues to decline family involvement in assessment and/or treatment, careful exploration of their reasons is warranted. In rare cases, such as severe estrangement or abuse, involvement of the family may be inappropriate. Further discussion of issues of family involvement in care and confidentiality is in Guideline 3.3.10, 'Family involvement'.

Communication of rights and responsibilities

Rights and responsibilities of mental health service users and providers are outlined in the federal Mental Health Statement on Rights and Responsibilities [287] and various state documents (e.g., Victoria: Charter of Human Rights and Responsibilities; NSW: Department of Health Charter for Mental Health Care in NSW), as well as the United Nations Principles for the Protection of Persons with Mental Illness and for the Improvement of Mental Health Care. Although these rights and responsibilities should be canvassed throughout service engagement with individuals and their families and other networks, assessment is the most appropriate time to initially communicate them in user-friendly ways (see Box 6).

Box 6. Communication of rights and responsibilities should occur in a timely fashion (ideally within 48 hours of assessment) This includes:

- Information packs about treatments and services available
- Written and verbal information regarding rights (especially privacy rights) and responsibilities after entry to the service, particularly with respect to involuntary admissions and treatment
- Ways to access complaints procedures
 Provision of feedback and diagnosis

It is both ethically sound and good practice to provide the person being assessed, and, where appropriate, their support networks, with feedback regarding the assessment process. This includes diagnosis and any formulation that the assessor may be considering in relation to the individual's difficulties (see Box 7). Feedback should be provided to the referrer and where possible to the individual's GP.

In the case of the UHR group, information about the nature of symptoms and the risk of transition should be carefully provided within a framework of therapeutic optimism. It is important to confirm that current problems can be alleviated, that progression to psychosis is not predetermined, and that effective and well-tolerated treatments are readily available. The person can be reassured that if a more severe disorder were to develop, treatment would be available immediately.

Recommendations

- **2.1** Assessment begins therapeutic engagement and treatment, so establishing rapport should be a priority. GPP
- **2.2** Assessment is an ongoing process, not just restricted to initial entry into service. GPP
- **2.3** Assessments should occur as soon as practicable after referral, and within 48 hours in the case of suspected FEP.^{GPP}
- 2.4 All young people presenting with possible psychosis should have a comprehensive biopsychosocial assessment by an acute treating team. This should include: developing an understanding of the personal context of illness and developing a case formulation; mental state examination; physical examination and investigations; cognitive assessment; assessment for comorbid disorders; and risk assessment.
- 2.4.1 Assessment of the personal context of illness should include: developing an understanding of the longitudinal course of symptoms and how they are regarded by the young person; and the young person's strengths, resources (including family resources), and skills in managing these symptoms specifically and other stressors more broadly. GPP
- **2.4.2** Mental state examination, assessing signs, symptoms, and insight, is aided by an antipsychotic-free period of assessment. GPP
- 2.4.3 Physical examination, including baseline assessment of metabolic functioning (see Guideline 3.3.2) and related lifestyle factors (such as diet and exercise) should occur to rule out an organic basis to illness, guide appropriate treatment, and enable monitoring of side effects. Basic metabolic monitoring should be ongoing and include regular weight and waist circumference measurement. GPP

- 2.4.4 Assessment for comorbid disorders should include thorough and regular assessment of substance use (including cigarette use) and other psychiatric disorders. GPP
- 2.4.5 Risk assessment
- 2.4.5.1 Risk assessment should be undertaken and documented at each visit, and should include routine assessment of depressive symptoms, hopelessness, suicidal intent, the effect of returning insight, and the role of psychotic features on mood. GPP
- 2.4.5.2 Risk assessment should take into account the fluctuating nature of suicidality in young people. GPP
- 2.4.5.3 Risk assessment should also include assessment of risk to others, risk attributable to neglect and victimisation by others, and risk of non-adherence to treatment (including absconding). GPP
- 2.5 Where possible, informants (particularly referrers, but also other key members of the young person's social networks) should be drawn upon as valuable sources of information about the trajectory and nature of the young person's difficulties. Assessment should also consider needs of the family, their knowledge of psychosis, the impact of psychosis on the family, and their strengths and coping resources. GPP
- **2.6** Feedback regarding assessment (particularly provisional diagnoses and possible formulation of the young person's difficulties) should be provided to the young person, and to referrers and GPs, and, where appropriate, to other key supports of the young person. GPP
- 2.7 Rights, responsibilities and information about the treatments and services available within the service should be communicated to young people and their key supports within 48 hours of entry to the service. GPP

Guideline 3. Treatment

'Detecting an illness early is of value only if effective treatment is readily available' (Falloon et al, p. 33[288]). Some principles apply regardless of phase of illness, and in many ways reflect good practice points in working with young people broadly. The pre-onset and first-episode periods do however have their own specific treatment issues. Further, different approaches are likely to be indicated across the different phases of acuity in the FEP group (acute phase, early recovery, relapse, and late recovery/discharge). This section outlines:

- principles specific to the UHR group
- principles specific to the FEP group, including general principles for FEP and principles for the different phases of acuity (i.e., the acute phase, early recovery, relapse, and late/problematic recovery)
- principles related to discharge from the clinical service
- principles that operate regardless of illness phase.

Guideline 3.1. Treatment guidelines for the UHR phase

Background

One meta-analysis reports that various interventions at the UHR stage reduce the risk of transition to a first episode of psychosis by 54% (at 12 months [289]). A number of review articles and books are available on psychological intervention in the pre-psychotic phase that provide more detailed information than these guidelines can outline (e.g., Addington et al. [290]; McGorry et al. [15]; Yung et al. [3]). Information is much more limited regarding medical management of this phase. A summary of relevant issues is offered here. Case management is clearly an intervention in its own right; however, the principles of case management in both UHR and FEP are reviewed in Guideline 3.3.4. This section focuses on the evidence surveying specific interventions implemented in a standalone manner. Evidence concerning both CBT and supportive therapy when combined with other interventions in the UHR period is also discussed.

Psychological therapies for UHR

There have been considerable advances in the use of psychological therapies as treatment components for psychosis (see Box 7 for CBT intervention in the UHR phase). They can be helpful to target specific treatment needs, for example addressing the distress caused by hallucinations, and more generally in areas such as engagement with treatment. CBT has been the primary stand-alone psychological intervention explored in empirical research in the UHR phase, with a particular focus on reducing psychotic symptoms and/or delaying or preventing transition to psychosis. CBT is an intervention which challenges patterns of thought and the behaviour associated with these thoughts [291, 292]. An overarching paradigm within the CBT model of psychosis is the stress-vulnerability framework.

Box 7. The focus of CBT in the UHR phase is to:

Enhance understanding of symptoms being experienced (including psychotic and nonpsychotic symptoms) and target the symptoms through strategies such as:

- psychoeducation and normalisation of anomalous experiences by provision of a general biopsychosocial model of these
- challenging and 'reality testing' delusional thoughts and hallucinations
- enhancing coping strategies regarding positive symptoms (such as distraction and withdrawal, as well as more general coping strategies outlined below)
- encouraging self-monitoring of symptoms to establish any relationship between symptoms and stress
- with respect to negative/depressive symptoms, encouraging scheduling and monitoring of mastery and pleasure activities and cognitive restructuring of negative and self-defeating cognitions
- strengthening coping resources to ameliorate the impact of stressors and, hence, vulnerability to developing further or more severe symptoms, via strategies including:
 - psychoeducation about the nature of stress and anxiety
 - monitoring of stress
 - introduction of stress management techniques
 - identification of maladaptive coping techniques and promotion of more adaptive responses to stress
 - identification and restructuring of cognitions associated with stress or anxiety, and replacement of these with more positive coping statements
 - goal-setting, time management, assertiveness training and problemsolving skills [2-4].

To date, four studies support the efficacy of CBT as a stand-alone intervention in preventing or delaying transition to a first episode of psychosis, and/or treating symptoms in the UHR period.

Morrison et al. [29] reported that cognitive therapy (CT) alone (up to a maximum of 26 sessions over 6 months, with an average number of 12 sessions) significantly reduced the likelihood of transition to psychosis (as operationalised by either scores on the Positive and Negative Symptom Scale or meeting criteria for a DSM-IV psychotic disorder) and prescription of antipsychotic medication by an independent medical practitioner at 12-month follow-up. CT also predicted prescription of antipsychotics and transition to psychosis (but on the PANSS only, and only when controlling for baseline cognitive factors such as metacognitive beliefs) at 3-year follow-up [293]. Social functioning and distress were, however, unaffected by CT. In brief, treatment included the development of a case formulation and shared goals, with treatment techniques such as examining the pros and cons of particular ways of thinking and behaving, considering evidence and alternative explanations for beliefs, and behavioural experiments to evaluate beliefs [294].

More recently, Van der Gaag and colleagues [295] found that 26 weekly sessions (6 months) of CBT significantly reduced transition to psychosis at treatment end and 18 month follow-up (relative to treatment as usual) in help seeking UHR participants. Moreover, participants receiving CBT intervention had a significantly higher remission rate (from 'at-risk' status) at follow-up. The CBT intervention targeted cognitive biases typical for UHR young people. This included increasing the participants' awareness of cognitive biases, and correcting for them (i.e., selective attention to threatening stimuli, confirmation bias, negative expectation bias, causal reasoning over coincidences).

Another recent study by Bechdolf and colleagues [296] described a CBT intervention for those in the 'early initial prodromal state' (i.e., experiencing basic symptoms or experiencing functional decline plus other risk factors such as family history of psychotic disorder, rather than meeting UHR criteria). This CBT intervention used a stress-vulnerability model, focusing on shared problems and goals, guided discovery as the engine for change, skills training, cognitive remediation, and

psychoeducation for family and carers. Only 2/63 (3.2%) participants receiving CBT transitioned to a first episode of psychosis, compared with 11/65 (16.9%) who received supportive counselling. This effect was sustained at 24-month follow-up: individuals who received supportive counselling were 3.7 times more likely to transition to a first episode of psychosis, relative to participants receiving CBT intervention (p = 0.019).

Whilst some studies investigating CBT intervention in at-risk cohorts have shown no benefit [297-299], two recent meta-analyses conclude that CBT may be beneficial in delaying or preventing onset of psychosis in UHR individuals [300, 301]. These are supported by a systematic review reporting that CBT reduces subthreshold symptoms at 12 months and reduces the risk of transition to psychosis at 6, 12 and 18–24 months [302]. CBT is a benign intervention that may achieve a balance of safe and effective treatment, which is important given the high rate of false positives in UHR cohorts.

Medication

Information to date suggests that medication, particularly low-dose antipsychotic medication, may be effective in preventing or delaying transition to psychosis in the short-term when combined with CBT [28, 303]. Antipsychotic medication may also be helpful in ameliorating symptoms and preventing transition to psychosis when used alone. The PRIME study was a randomised double-blind trial of comparing the efficacy of 5-15 mg olanzapine with placebo. Eightweek follow-up suggested that olanzapine was associated with significantly greater improvement in psychotic symptoms than placebo [304], and there was a trend for those in the olanzapine group to be less likely to transition to psychosis at 1-year follow-up. However, there was no difference approaching significance at 2-year follow-up [305].

Although these data suggest a possible role of antipsychotic medication in preventing or delaying transition to psychosis, there are a number of concerns about prescribing antipsychotic medication to the UHR group. These include: the potentially serious side effects of antipsychotic medications, which may be particularly distressing to young people (e.g., weight gain, sexual dysfunction, extra-pyramidal side effects); self-stigmatisation; the need to prioritise

pharmacological treatment of comorbid disorders; and the fact that pharmacological interventions for psychotic symptoms in the UHR group may be less acceptable to consumers, given drop-out rates in trials using pharmacological interventions [222]. These are particularly salient in the UHR group because of the false-positive phenomenon noted earlier – individuals may be prescribed antipsychotic medication and experience all of these adverse events when they were not at risk of psychosis in the first place.

Preliminary naturalistic data also suggests that antidepressant medication may be associated with lower rates of transition to psychosis than antipsychotics [225, 306]. Additionally, longchain omega-3 polyunsaturated fatty acids (PUFAs) reduced the rate of progression to psychosis in comparison with placebo in one randomised controlled trial [307]. A longerterm follow-up of this study at a median of 6.7 years, again showed positive effects of omega-3 PUFAs reducing both the risk of progression to psychotic disorder and psychiatric morbidity in general [308], while a recent multi-centre replication omega-3 trial reported inconclusive results [739]. Thus, medical treatments that are more benign than antipsychotics may be effective [15]. For these reasons, further research is required before antipsychotic medication can be recommended for treatment of the UHR group [309].

However, in exceptional circumstances a low-dose SGA medication may be indicated. One example would be if there were rapid worsening of psychotic symptoms, significant deterioration in functioning related to these symptoms and elevated risk to self or others. In this case antipsychotics would be used not only to prevent onset of psychotic disorder but also to ameliorate distress and the deteriorating social functioning associated with this state. This is not justified in the majority of such situations (see recommendation 3.1.8).

These data should not, however, preclude the pharmacological treatment of comorbid psychiatric disorders, notably depression, in accordance with relevant treatment guidelines.

Integrated treatment

While there has been growing research focused on the individual components of treatment in early

psychosis, a key issue is the role of specialised or streamed systems to deliver mental health care. Integrated treatment refers to packages that combine psychological and pharmacological interventions, together with needs-based case management. The Early Psychosis Prevention and Intervention Centre (EPPIC) in Victoria pioneered the development of such systems and showed that they were superior to historical and generic models of care [310]. Many of the trials in this group compare an active intervention with treatment as usual within this specialist paradigm; fewer studies have examined the difference between treatment as usual within a specialist integrative service and less broad-based approaches.

In the pre-onset group, results of trials implementing integrated therapy have emerged from two countries, Australia and Denmark. The Australian study examined the influence of CBT, combined with either low-dose risperidone or placebo, and supportive therapy (aimed at helping people to cope with current problems, primarily social relationships and vocational and family issues, without CBT) plus placebo, in the UHR group. All groups received needs-

based case management, and pharmacological treatment of comorbid disorders if necessary. The authors found that those in the supportive therapy control group (n=28) were more likely to transition to frank psychosis than those in the intervention group (n=31), but this difference was no longer significant at 1-year follow-up, 6 months after treatment had ended [28] or at 3–4 year follow-up [303]. These findings suggest that the combination of antipsychotic medication and CBT may delay but not always prevent transition to psychosis in the UHR group.

The Danish study (OPUS [311]) evaluated an intervention package including assertive community treatment (with a focus on symptom monitoring and treating comorbid substance use), social skills treatment, and psychoeducation for participants and their families in multi-family groups. Results suggested that there was a lower transition rate from schizotypal to psychotic disorder for those receiving the integrated treatment than those receiving treatment as usual at 12-month follow-up. These data suggest that this integrated intervention at the least postponed and possibly prevented transition to psychosis.

Recommendations

- 3.1.1 The possibility of psychotic disorder should be considered for anyone who is experiencing unexplained functional decline.^A
- 3.1.2 If subthreshold psychotic features combined with the onset of disability indicating ultra high risk are present, the individual and their relatives should be assessed and mental state and safety monitored regularly (every 2-4 weeks) in a context of ongoing support. CBT is the preferred intervention.^C
- **3.1.3** Information about the level of risk should be carefully provided taking into account social, educational and cultural factors.^C
- **3.1.4** Syndromes such as depression and substance use, and problem areas such as interpersonal, vocational and family stress, should be appropriately managed.

- **3.1.5** CBT may reduce psychotic symptomatology and prevent or delay transition to psychosis in the pre-onset phase.
- **3.1.6** CBT may improve social functioning in the pre-onset phase.
- **3.1.7** Supportive counselling alone may improve social functioning in the pre-onset phase.
- 3.1.8 Antipsychotic medications should not normally be prescribed unless at least 1 week of frank positive psychotic symptoms have been sustained. The exception may be where briefer or milder positive symptoms are directly associated with risk of self-harm or aggression. E.g. in substance-related psychotic disorder, or when subthreshold positive psychotic symptoms persist in the face of CBT and other psychosocial treatments and are causing distress and or disability.
- **3.1.9** Omega-3 fatty acids may delay or prevent transitions to psychosis.^c

Guideline 3.2. Treatment guidelines for first episode psychosis

Most empirical research in early psychosis, particularly in psychological therapies, tailors treatment to the specific phase of psychotic illness. Guidelines relevant to the acute, early recovery, relapse, and late/problematic recovery and discharge phases are outlined in turn below.

Guideline 3.2.1. The acute phase Background

It is usually during the acute phase that someone first contacts mental health services. The presentation will determine the initial setting for treatment (i.e., inpatient or outpatient care). This first presentation of suspected psychosis is considered a psychiatric emergency requiring immediate treatment, in order to reduce both DUP and distressed caused to the individual and caregivers.

The overall aims of treatment during the acute phase are to:

- monitor the individual's mental state
- gain a thorough understanding of the person and their situation as quickly as possible
- ensure the safety of the individual and others
- reduce delay in effective treatment by treating or preventing:
 - positive symptoms of psychosis and disturbed behaviour
 - negative symptoms and coexisting problems such as depression, mania, anxiety or panic attacks and substance abuse
- build a sustainable therapeutic and supportive relationship with the individual and carers
- develop a management plan to aid recovery from the acute episode, reduce risk of relapse and promote long-term well-being
- · minimise trauma
- instil realistic hope
- provide an acceptable explanatory model, with education about psychosis and its treatment
- inform and support the family to relieve their distress and to promote optimal family functioning.

Medication in the acute phase

Pharmacotherapy is a first-line treatment for psychotic disorders and therefore a medical practitioner must be involved at the commencement of treatment for FEP. There are a number of differences between young people with FEP and people with established schizophrenia that should be considered when prescribing pharmacological treatments for FEP. A summary of the issues particular to this group is presented in Box 8. The safety and efficacy of antipsychotic and mood-stabilising medications have not been systematically evaluated in young people, and extrapolation from adult studies, clinical experience and expert opinion governs their off-label use in this population [312, 313]. Little information is available about the longterm effects of antipsychotic medications on the development of the central nervous system [313].

Box 8. Particular considerations for pharmacotherapy in the FEP group

- Young people with FEP are often antipsychotic-naïve.
- A young person's first experience of antipsychotic medication (response and side effects) will influence their engagement and adherence [5].
- People with FEP often respond to much lower antipsychotic doses than those with established illness [7, 8].
- People with FEP generally show a more rapid improvement in symptoms than people with established schizophrenia [7].
- Positive symptoms in people with FEP are generally responsive to treatment in terms of overall response rate and degree of symptom reduction [12].
- People with FEP and young people may be particularly sensitive to antipsychoticassociated extrapyramidal side effects [8, 12-14].
- People with FEP are more susceptible to antipsychotic-associated weight gain and metabolic side effects than those with more chronic illness, due to their younger age and often being antipsychotic-naïve[14].

Diagnostic instability in FEP may require ongoing adaptation of pharmacological interventions [7].

Figure 4. Pharmacological treatment for first episode non-affective psychosis

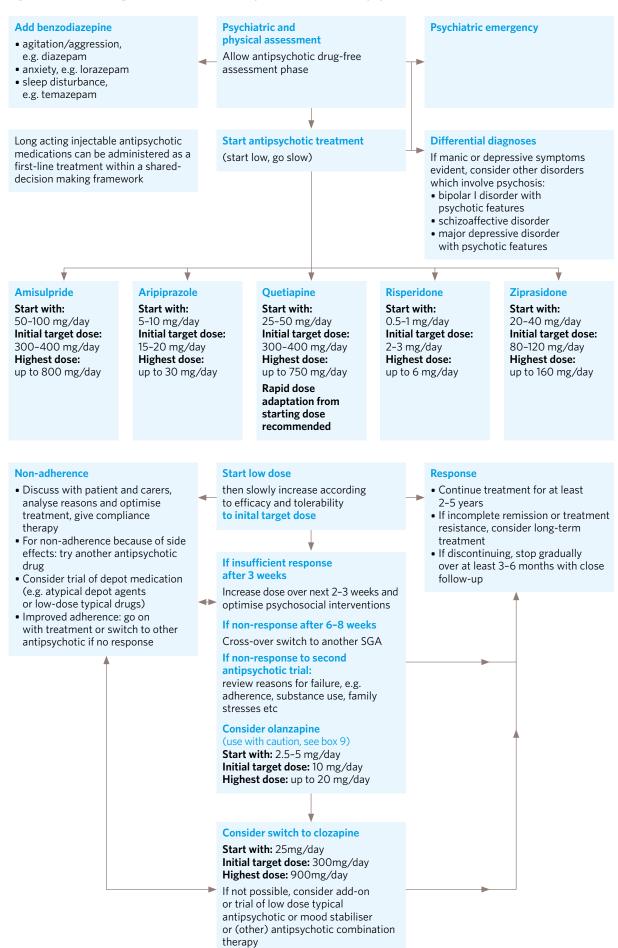
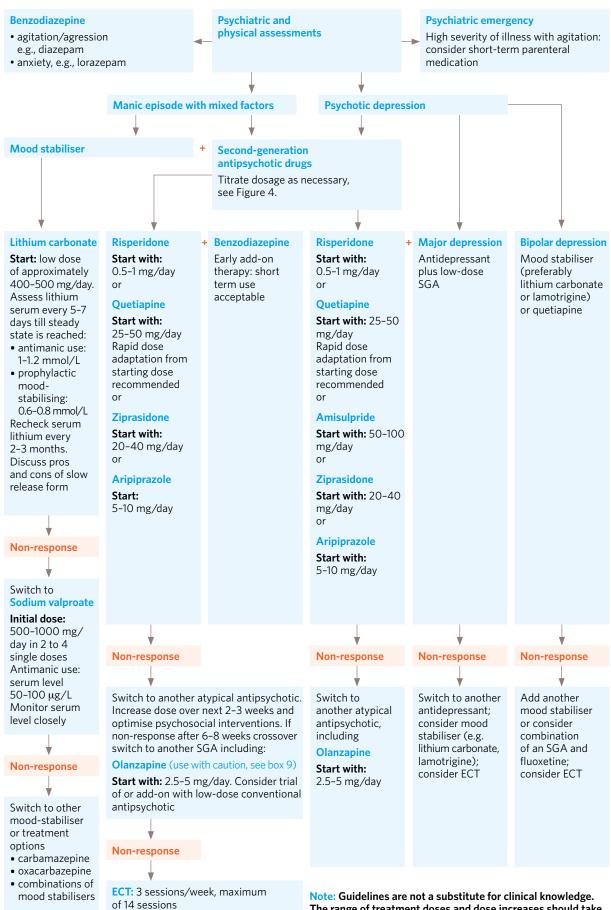


Figure 5. Pharmacological treatment for first episode affective psychosis



Caution: Sodium valproate in women
Caution: Concurrent adminstration of lithium
or anticonvulsive mood stabilisers with ECT

Note: Guidelines are not a substitute for clinical knowledge. The range of treatment doses and dose increases should take into account clinical presentation.

Quetiapine (quetiapine fumarate) in this algorithm refers to non-extended release formulation.

Atypical, or second-generation, antipsychotics (SGAs) are preferred over typical, or first-generation, antipsychotics (FGAs) for initiation of antipsychotic treatment in young people, due to better tolerability (see Principle 1 on page 57). It is also possible that SGAs may have better effects on cognition, although the evidence is currently equivocal.

Algorithms for medication prescribing in non-affective and affective FEP are presented in Figures 4 and 5, and principles of pharmacotherapy in FEP are listed in Box 10 and elaborated below. Recent studies report newer antipsychotic medications (i.e., lurasidone and asenapine) improve psychopathology in schizophrenia populations [314-317]. However, further studies with early psychosis cohorts are required to confirm their suitability, and as such, these agents are not currently included in the algorithms.

Box 9. Caution re Olanzapine as treatment for young people with FEP: the evidence

Olanzapine-elicited weight gain is equivalent to clozapine, and greater than other SGAs [318]. This effect is pronounced in early psychosis cohorts: clinically significant weight gain occurs far more frequently with olanzapine than with alternative first-line treatment options[319-321].

Multiple short-term studies in healthy volunteers have found evidence that olanzapine causes significant metabolic changes within hours or days of commencing treatment. Changes include:

- impaired insulin action on glucose [322]
- elevated fasting plasma leptin and triglycerides [323]
- elevated post-prandial insulin and accompanying insulin resistance [324]
- decreased glucose effectiveness and raised fasting glucose [325]
- increased food intake [13, 326].

These studies, in over 90 healthy volunteers, are not confounded by participants' experiencing psychotic symptoms, or underlying genetic risk for metabolic disease.

Given the greater propensity of olanzapine to elicit weight gain and other metabolic complications (relative to other SGAs), we strongly recommend that olanzapine use in first episode psychosis is limited to those young people in whom a trial of at least one other SGA has demonstrated inadequate control of psychotic symptoms.

Box 10. Principles of pharmacotherapy in FEP

Principle 1. Take side effect profiles into consideration

Principle 2. Prevent and treat psychiatric emergencies

Principle 3. Distinguish between affective and non-affective psychosis

Principle 4. 'Start low, go slow'

Principle 5. Avoid antipsychotic polypharmacy

Principle 6. Monitor adherence and address non-adherence

- Factors affecting adherence
- Shared decision making to facilitate treatment adherence
- Managing non-adherence
- Long-acting injectable (depot) medications to address non-adherence

Principle 7. Monitor and manage adverse events and side effects

Principle 8. Treat comorbidities

Principle 9. Identify failure to respond but provide a sufficient period for treatment response and remission

Principle 10. Use special care when prescribing for specific populations

- Children
- Women of child-bearing age, and pregnancy
- Breastfeeding mothers
- Young people with diabetes

Principles of pharmacotherapy in FEP Principle 1. Take side effect profiles into consideration

Young people appear to have a higher risk than adults for antipsychotic-associated weight gain, hyperprolactinaemia, extrapyramidal side effects (EPSEs) and sedation, and associated metabolic abnormalities [327]. At a time when young people are experiencing psychological and physical maturation, the impact of these side effects may be different from that in adults.

A Cochrane review of the efficacy of SGAs in adolescents reported that there was insufficient evidence to suggest that SGAs have superior efficacy to FGAs, with the exception of clozapine in treatment-refractory schizophrenia [328]. However, an open randomised clinical trial in 498 people with first-episode schizophrenia has shown higher response and remission rates for SGAs compared with the FGA haloperidol [329].

Regardless, the tolerability of SGAs appears to be greater in the early psychosis population, with fewer side effects seen in the short term [328]. While there is little evidence to suggest that one SGA is preferable to another in this context, side effect profiles of SGAs vary markedly, and these should be taken into consideration when prescribing antipsychotics to young people [328]. For example, SGAs with a known propensity to cause weight gain, such as olanzapine [328, 330, 331] should be avoided as first-line pharmacotherapy, while those with the lowest risk of weight gain (e.g., aripiprazole and ziprasidone) should be preferred. See Table 9 for a summary of side effects of antipsychotic therapy. The main considerations when selecting an antipsychotic for FEP in young people should be their response to a trial of this medication and the most relevant side effects for the each person [328].

Table 9. Side effect profiles of commonly used antipsychotics

Adapted from *The recognition and management of early psychosis: a preventive approach, 2^{nd} Edition Henry J. Jackson, Patrick D. McGorry, Editors. 2009, Cambridge University Press: Cambridge p.194*

SGA	Severe side effects	Commonly reported side effects*	EPMS liability	Most common EPMS reported
Amisulpride	Elevated prolactin levels; can cause EPMS at higher dosage	Insomnia, anxiety	Low (at low dosage)	Akathisia
Asenapine	Moderate weight gain, EPMS at higher dosage	Somnolence, oral hypoesthesia	Low (at low dosage)	Akathisia, sedation
Aripiprazole	Can cause EPSEs at higher dosage	Restlessness, sleep disturbance, anxiety	Low (at low dosage)	Tremor, akathisia
Clozapine	Weight gain, metabolic syndrome with possible diabetic complications, cardiovascular/respiratory arrest	Hypersalivation, sedation, cognitive deficits	Extremely low	Bradykinesia, akathisia
Lurasidone	EPMS at higher dosage	Nausea, insomnia, vomiting, somnolence,	Low (at low dosage)	Akathisia
Olanzapine	Weight gain, metabolic syndrome with possible diabetic complications	Cognitive deficits, insomnia, anxiety	Very low	Tremor, subjective akathisia
Quetiapine	Moderate weight gain	Somnolence, dizziness, orthostatic hypotension	Extremely low	Tremor, akathisia
Risperidone	Elevated prolactin levels; can cause EPSEs at higher dosage; moderate weight gain	Headaches, insomnia, anxiety, sexual dysfunction	Low (=4 mg/day)	Acute dystonia, Parkinsonism, few cases of tardive dyskinesia
Ziprasidone	Prolongs QT interval	Somnolence, dizziness	Very low	Tremor, akathisia
Zotepine	Can cause electrocardiographic changes; moderate weight gain	Nausea, somnolence, dizziness	Low (at low dosage)	Acute dystonia, Parkinsonism

EPMS, extrapyramidal motor symptoms.

*All antipsychotic drugs are associated with hyperglycaemia and possible diabetes mellitus

It is imperative to address the physical and sexual health issues of young people receiving treatment for psychosis. These areas are elaborated in guidelines 3.3.2 and 3.3.3.

Principle 2. Prevent and treat psychiatric emergencies

The immediate goals of emergency management of aggression or agitation are to assure the safety of the young person who is experiencing these symptoms, their family and friends, and health care providers, and to help the young person manage their emotions and distress and control their behaviour, while minimising the psychological and physiological impact on them [332, 333].

Non-coercive psychological and practical attempts at 'de-escalation' of an aggressive or agitated person are strongly encouraged as first-line management [332, 334]. If such strategies are not successful within a safe timeframe, then medication should be offered with the aim of achieving a state of calm [335]. Oral medication should be offered in the first instance [336].

Antipsychotics or benzodiazepines are used to quickly alleviate distress [337]. Both FGA and SGA medications appear to be effective, but benzodiazepines and SGAs have better tolerability [338]. Furthermore, the observed efficacy of SGAs may be dose-dependent [339].

Despite being commonly used in clinical practice, the available data comparing the efficacy of benzodiazepines and antipsychotics in controlling psychosis-induced symptoms of aggression and agitation are limited and of poor quality (for a meta-analysis, see Gillies et al. 2013 [337]). Based on this information, benzodiazepines appear to be as effective as antipsychotics alone, but with fewer side effects such as EPSEs [337]. The combination of a benzodiazepine and an antipsychotic does not convey any advantage over either drug alone.

If it is safe to do so, short-acting intramuscular (IM) benzodiazepines such as midazolam may be used in emergency situations where oral medication is not accepted or suitable. These have been used either alone or in combination with an antipsychotic. The antidote, flumazenil, and resuscitation equipment must be at hand.

IM antipsychotic medication is occasionally necessary [336] [340], and as with general medication principles in this group, the lowest possible dose to treat the symptoms should be used; the use of multiple antipsychotics is discouraged [336]. The young person should have close, regular medical and nursing monitoring for several hours following an IM injection [336].

A recent meta-analysis [340] concluded that IM SGAs were as efficacious as IM FGAs, and in some studies showed a superior and more rapid response. Furthermore, SGAs were better tolerated with respect to EPSEs. FGAs should therefore now not be used in FEP psychiatric emergencies.

Principle 3. Distinguish between affective and non-affective psychosis

While differentiation between specific diagnostic entities may be difficult at initial presentation, it is important to consider whether affective symptoms are present. This is because there are different treatment recommendations, especially the utility of adding a mood stabiliser to the pharmacotherapeutic regimen, during the acute phase. This key early distinction between affective and non-affective presentation must be made [341]. Identifying if delusions or hallucinations occur exclusively during a major depressive or manic episode and the severity of the depressive or manic symptoms helps to distinguish between affective and non-affective psychosis [36].

Principle 4. 'Start low, go slow'

Evidence suggests that there is a biological sensitivity to antipsychotics during the first onset of psychosis. People with FEP respond more rapidly to antipsychotic medication. They generally require lower doses to achieve a greater response than people with more established illness [7]. In addition, side effects of antipsychotics can occur at substantially lower doses in the first-exposure population than in people re-exposed to antipsychotics [7]. Rapid titration may also increase the incidence of side effects [33]. Accordingly, a 'start low, go slow' prescribing approach is absolutely essential, using the lowest possible dose to control symptoms [342].

Box 11. **Use benzodiazepines for sedation [343]**

The principle of 'start low, go slow' for the initiation of antipsychotic medication is extremely important. Doses of antipsychotic medication should commence at the lowest effective dose for the treatment of psychotic symptoms. Although clinicians often increase doses of antipsychotic medication to produce a sedative effect, there is no reason to do this, and it is recommended that clinicians use benzodiazepines for sedative purposes. Antipsychotic dose escalation should be done slowly in a series of careful 'steps', over many weeks, and only if required.

Principle 5. Avoid antipsychotic polypharmacy

Although relatively common in clinical practice [344, 345], there is little empirical evidence to suggest that combining antipsychotic medications has superior efficacy to monotherapy in the treatment of psychosis [344, 345]. Furthermore, combining antipsychotic medications is associated with an increased risk of side effects, non-adherence and drug interactions [344]. The majority of international guidelines for schizophrenia recommend against the use of more than one antipsychotic [342, 345, 346], except when changing medications [342, 346] or during augmentation with clozapine in treatmentresistant cases [344]. Although there have been no direct randomised controlled trials of antipsychotic polypharmacy in FEP populations, the increased propensity for side effects in this population would not support this practice.

Principle 6. Monitor adherence and address non-adherence

Non-adherence to medication is particularly prevalent in young people [347], and people with FEP who are non-adherent tend to be younger [348]. One study found that during the first 6 months of treatment, 45% of people with FEP were non-adherent to antipsychotic therapy [349], and Hill et al (2010) found that 26% of their FEP sample were non-adherent at 4 years [350]. There are a multitude of factors that are particularly relevant to young people with FEP that can affect medication adherence, some of which are presented in Box 12.

Box 12. Factors that affect medication adherence in young people with FEP

The young person's environment, including the level of social support they receive [5] Family attitude to mental illness medication and the young person's relationship with family members [5-7]

Sensitivity to medication side effects [11] Limited insight or acceptance of the illness (particularly important in young people with FEP, who have no previous experience of

A belief that treatment is unnecessary [11] Substance use [5]

psychotic illness) [5, 8]

Homelessness or housing instability [5, 8]

Shared decision making to facilitate treatment adherence

Shared decision-making is well established in general medicine as a way to include patient preferences in decisions about their treatment [14]. Including the young person and their family in treatment decisions is likely to increase concordance (i.e. the degree to which the young person's behaviour agrees with clinical advice), which may in turn, improve adherence. Indeed, an effective collaborative working alliance, with agreement between the clinician and young person regarding the goals of treatment and the tasks to achieve these goals has been shown to increase medication adherence in FEP [351]. The decision-making process for antipsychotic medication should include psychoeducation about why treatment is necessary and why medications must be continued after the young person's symptoms have responded to treatment. It should also include an open and honest discussion about the possible side effects of medication. The young person should be informed that switching medications is an option if they experience intolerable side effects with their initial treatment, as side effects are a common reason for nonadherence.

Managing non-adherence

A non-judgemental reaction to non-adherence will encourage honesty and ongoing engagement. The young person's reasons for non-adherence should be discussed, as they may suggest a strategy to address this issue. For example, if cognitive difficulties and/or memory impairment

have contributed to non-adherence, strategies that help the young person remember to take their medication should be tried, such as involving a family member or significant other in reminding the young person to take their medication as prescribed. A motivational interviewing approach could also be effective.

Side effects such as weight gain, sedation, cognitive dulling and others are strongly related to non-adherence [352]. Clinicians should try to anticipate and address side effects to reduce the chance of non-adherence (e.g., clinicians can anticipate weight gain by providing education about diet and exercise as soon as a young person is commenced on an antipsychotic. See also 'Physical health management' on page 76). Persistent endocrine and sexual side effects may warrant a switch of medication.

Although compliance therapy has been proposed as a way to promote adherence with a range of interventions, there is insufficient evidence to date that it improves adherence with pharmacological treatment [353]. Other strategies for managing non-adherence have been shown to be effective in people with established schizophrenia, and may also be useful in FEP. These include training for case managers in medication management and person-specific tailoring strategies and programs to compensate for cognitive deficits in people with schizophrenia, such as telephone intervention and cognitive adaptation training [353]. Intervention strategies that span a longer period of time are beneficial, particularly in FEP [353].

Long-acting injectable (depot) medications to address non-adherence

Long-acting injectable (LAI), or depot, medications may be considered in FEP if adherence to oral antipsychotic treatment is known or suspected to be a problem. [5] LAIs may be particularly useful to address covert non-adherence, as a clinician is involved in the administration of the medication [353, 354]. Assured administration of medication delivers a reasonably constant dose of antipsychotic and may minimise side effects and the risk of overdose [355]. Avoiding the peaks and troughs in blood levels of antipsychotic medications that occur with oral formulations may also improve tolerability [11].

Despite their perceived reluctance to accept LAIs, young people with FEP may in fact find them

effective and acceptable [354]. For example, a young person might prefer an LAI over oral treatment as it does not serve as a constant reminder of their illness, or because it is more convenient, particularly for those who forget to take regular medication or have cognitive or social barriers to regular medication adherence [356]. If the treating team thinks it may be of benefit, LAIs should be presented to a young person as one of many early treatment options. It is important that the young person is also provided with appropriate information about LAI medication to ensure a collaborative decision is made. Premature coercive use of LAIs must be avoided.

Principle 7. Monitor and manage adverse events and side effects

Antipsychotic medication may cause side effects that are distressing or disabling for young people [8]. Side effects of current antipsychotic medications are shown in Table 9.

There are consistently strong correlations between patients' assessment of the impact of side effects and non-adherence [352]. In addition to actively enquiring about side effects and discussing their concerns, a validated self-rating tool to measure the young person's perception of the side effects they are experiencing (e.g., the Liverpool University Neuroleptic Side Effect Rating Scale [357]) may provide additional information on the tolerability of their treatment regimen.

It is imperative to address the physical and sexual health issues of young people receiving treatment for psychosis. These areas are elaborated in guidelines 3.3.2 and 3.3.3.

Principle 8. Treat comorbidities

Psychiatric comorbidities are common in people with FEP, and are often present before the first episode of psychosis occurs [230]. In addition, people with schizophrenia have a higher risk of anxiety or depressive disorders than the general population [232]. As many as 80–90% of people with FEP fulfil the diagnostic criteria for at least one comorbid psychiatric disorder [8]. Major depression, anxiety disorders (including social phobia and post-traumatic stress disorders) and obsessive-compulsive disorder can occur concurrently with FEP [8].

Depression and anxiety in people with psychosis are often associated with poorer outcomes such as increased hospitalisation rates and subjective

assessment of psychosis-related difficulties [358]. Anxiety and depression levels are also related to rates of suicide and self-harm [14, 358, 359].

Comorbid substance use, including nicotine and alcohol, is common in people experiencing a first episode of psychosis [7], and may increase risk factors for relapse even in people who are adherent to their medication. Comorbid substance use is also associated with a worse prognosis in general, including more severe positive symptoms, longer periods of hospitalisation and poorer adherence to medication [7].

Defining the boundaries of comorbid conditions may be difficult due to the interaction between the symptoms of the primary disorder and those of comorbid conditions [8, 14, 232]. Periodic reassessment in people with FEP is often required [8, 14]. Therapeutic interventions are recommended when the presence of comorbidities impacts on the effective management of the primary psychotic disorder [8, 358]. Pharmacological treatment of psychosis also has side effects that can affect a young person's health or pre-existing medical comorbidities, as discussed in Guideline 3.3.2, 'Physical health'.

Principle 9. Identify failure to respond but provide a sufficient period for treatment response and remission

Symptom response and remission can be defined in a number of ways, including via symptoms themselves (total score reduction of ≥ 20% on the PANSS or a reduction of ≥ 2 on the Clinical Global Impression Severity scale) or subjective wellbeing (≥ 20% increase in the Subjective Wellbeing Under Neuroleptic treatment Scale: Lambert et al. 2006, 2007 [360, 361]). Some research shows that symptoms will generally respond to treatment within 6-8 weeks [362] and that 10-15% of people with FEP require 7-10 weeks for symptom response or remission [363-365]. However, Lambert et al. [361] suggest that incomplete response within 4 weeks of treatment predicts non-response at 3 months, which in turn predicts incomplete remission at 24 months [360].

Given the difference between these suggestions, we propose that treatment non-response 4 weeks after commencement should be an alert for possible longer-term non-response, especially in combination with other factors that predict poor response. Predictors of poor response include: a GAF score ≤ 70 in the year prior to onset; highest

level of schooling \leq year 10; a current GAF score \leq 30; male gender; and meeting friends no more than 2-3 times per month [366].

Principle 10. Use special care when prescribing for specific populations

Children

There are no dosing recommendations for amisulpride, aripiprazole, olanzapine and ziprasidone in people aged under 18 years, for clozapine in people aged under 16 years or for risperidone in people aged under 15 years [367-372]. Quetiapine is indicated for bipolar disorder in young people from the age of 10 years, and in schizophrenia from the age of 13 years [373]. Amisulpride is contraindicated in pre-pubertal children[367].

Children and adolescents are thought to be more susceptible than adults to EPSEs caused by FGAs and metabolic abnormalities associated with SGAs, especially weight gain [374]. Obesity in young people appears to carry a greater risk of future adverse cardiovascular outcomes than adult-onset obesity [375]. For this reason, olanzapine, which is associated with the highest risk of weight gain of the SGAs [376], is not considered a first-line antipsychotic medication in children and adolescents [374]. Increased prolactin levels in this population should also be considered in the light of physical growth and bone mineralisation [374].

Less information is available on the use of mood stabilisers in children [375]. The mood stabiliser lamotrigine is associated, in both adults and children, with the development of potentially life-threatening rashes, such as Stevens-Johnson syndrome (SJS) and toxic epidermal necrolysis, in both adults and children [377]. However, the risk of serious skin rashes is higher in children than in adults [377]. Lamotrigine is used off-label to treat bipolar disorder in children and adolescents aged under 18 years [377].

Treatment with antidepressants is associated with an increased risk of suicidal thinking and behaviour in children and adolescents with major depressive disorder and other psychiatric disorders [378]. Close observation for any signs of increased risk of suicide should be maintained in children and adolescents with depression [378].

Women of child-bearing age and during pregnancy

In young women of child-bearing age, special consideration must be given to the risk to the foetus from exposure to psychotropic medication, balanced with the risk to the mother and child from deterioration or relapse of psychosis if treatment is discontinued [379]. This is particularly relevant to women with psychotic disorders, as they have an increased risk of unplanned pregnancy compared with the general population [380, 381].

The risk of foetal malformation is greatest in the first trimester, and it is possible that the pregnancy may not be recognised until after this time [379]. The risks associated with the use of psychotropic medications during pregnancy should therefore be discussed with all young women of child-bearing age and a collaborative plan developed [379]. Sodium valproate is not recommended for use in women of child-bearing potential unless alternative therapeutic options are ineffective or not tolerated [382].

Hormonal contraceptives have been shown to increase the clearance of lamotrigine [377]. In women currently taking oral contraceptives who are starting lamotrigine, no adjustments are required to the recommended dose escalation guidelines [377]. However, in women on maintenance doses of lamotrigine who are starting oral contraceptives, the maintenance dose of lamotrigine will need to be increased by as much as two-fold [377]. Similarly, when discontinuing oral contraceptives that have been used concurrently with lamotrigine, it may be necessary to halve the maintenance dose of lamotrigine [377].

Mood stabilisers are assigned to Australian pregnancy category D, and should not be used during pregnancy unless there is no other suitable therapeutic option, with the risk to the foetus from exposure balanced against the risks associated with untreated or undertreated major mental illness during pregnancy [379]. In a recent systematic review of mood stabilisers (carbamazepine, sodium valproate, lamotrigine and lithium) during pregnancy, all were associated with increased risk of foetal malformation [379]. These were predominantly structural malformations, most commonly neural tube defects, but also including cardiac and craniofacial defects [379]. Sodium valproate was

associated with the highest rate of malformations, particularly at doses above 1000 mg/day [379]. Mood stabilisers are also associated with neonatal complications, necessitating careful assessment and monitoring of newborns exposed to these medications [383].

SGA medications have an Australian pregnancy category C classification, and their use during pregnancy is recommended only if the anticipated benefit outweighs the risk; the administered dose and duration of treatment should be as low and as short as possible. Although there are limited data on their safety, the risk of teratogenicity with SGAs does not appear to be increased over the background rate [383]. Exposure to FGAs and SGAs during the third trimester of pregnancy has been associated with extrapyramidal neurological disturbances and/or withdrawal symptoms in the newborn following delivery [367-373, 383].

Breastfeeding mothers

Antipsychotics and mood stabilisers are excreted in human breast milk and there is limited information on potential long-term effects on the infant [384]. Women should therefore be counselled about the benefits of breastfeeding versus the risk of exposure to the infant [384]. While in many cases the concentrations of drug in human breast milk are low, levels which approach clinical significance have been reported for some drugs [384]. Accordingly, manufacturers of these medications do not recommend their use while breastfeeding [367-373, 377, 382]. Clozapine is not recommended due to an association with infant agranulocytosis, decreased suckling, seizures and cardiovascular instability [385]. Ziprasidone may have adrenergic effects [385]. While any antipsychotic should be used with caution, olanzapine and FGAs, such as haloperidol, may carry lower risk [385]. Sodium valproate and carbamazepine appear to be relatively low-risk during breastfeeding [385]. Infants exposed to lamotrigine should be monitored for Stevens-Johnson syndrome (see use in children and adolescents) [385]. Lithium is associated with risks of neonatal toxicity and thyroid or renal dysfunctions and is not recommended for use in breastfeeding women [385].

Young people with diabetes

Hyperglycaemia, in some cases is extreme and associated with ketoacidosis or hyperosmolar coma or death, and has been reported in people

taking SGAs [367-373]. The relationship between SGA medications and blood glucose abnormalities is not fully understood, and is confounded by an increased background risk of diabetes mellitus in people with schizophrenia [367-373]. People with an existing diagnosis of diabetes mellitus should be closely monitored for worsening of glucose control when prescribed SGAs [367-373]. Similarly, people with risk factors for the development of diabetes should undergo fasting blood glucose measurement and periodic monitoring during treatment [367-373]. People who develop symptoms of hyperglycaemia during treatment with SGAs should also undergo fasting blood glucose testing [367-373]. See Guideline 3.3.2, 'Physical health', on page 76 for more information.

Psychological therapies: CBT, supportive therapy, and 'befriending'

CBT is the most widely-examined psychotherapeutic intervention for FEP. As in the UHR phase, CBT practitioners working with people with psychosis encourage them to learn alternative ways of thinking about particular situations or experiences and to develop adaptive strategies for dealing with stressors [386, 387]. Coping strategies for voices or distressing beliefs are not qualitatively different from coping strategies that may be used for any kind of distress related to low mood, anxiety, or feelings of shame. These interventions are most useful if the clinician has a good understanding of the meaning and distress-causing appraisals that the person holds in relation to their symptoms. One way to identify these appraisals is to use a cognitive-behavioural framework, which identifies triggers, appraisals, emotional, behavioural and physiological responses. There is no clear consensus as to what constitutes the most 'adaptive' coping strategy for psychotic symptoms, although there is some indication that active acceptance and passive coping may reduce distress more than resistance coping [388]. New coping strategies may be required to attenuate psychotic symptoms. In this case, the Hearing Voices Network (http://hvna.net.au/) have a number of free resources available. Other strategies clinicians can develop with the young person include normalising, distraction, reality testing, self-talk, relaxation, acceptance, getting active, and singing or humming [389].

Two studies have examined the role of CBT in the acute phase: the Study of Cognitive Realignment Therapy in Early Schizophrenia, or SoCRATES, study [390, 391], and the Active Cognitive Therapy for Early Psychosis, or ACE, project [392].

The model of the therapy used in SoCRATES is described elsewhere [393], but in summary, it aimed for intense treatment during the acute phase (15–20 hours within a 5-week treatment period, with booster sessions at 2 weeks, and 1, 2, and 3 months). The stages of this therapy were:

- engagement and detailed assessment of mental state and symptom dimensions, to enable a cognitive-behavioural case formulation. Engagement was facilitated by using the paradigm of the stress-vulnerability model to explain links between biological and psychological features of illness
- development of a problem list and prioritising of this according to associated distress
- intervention (especially for positive symptoms, by generating alternative hypotheses for abnormal beliefs and hallucinations, alleviating precipitating factors, and attempting to reduce distress associated with symptoms), and
- monitoring.

An initial study examined the impact of this intervention over the very short term, in a sample of 315 people with FEP (83% of the sample) or second-episode psychotic disorder randomised to either the intervention plus routine care, supportive counselling plus routine care, or routine care alone [391]. The nature of the supportive therapy was unclear, but appears to have followed similar guidelines to those used in Haddock et al. (1999) [390]. Supportive therapy in that study was non-directive and unstructured, with primary goals to provide clients with positive regard, emotional support, and social contact. These data found that those receiving the cognitive-behavioural intervention scored lower than those receiving routine care alone, on positive and negative symptoms in general and positive symptoms and delusions in particular, and lower on auditory hallucinations than those receiving supportive counselling plus usual care. These effects were noted at 4-week followup but not at 6-week follow-up. At 18-month follow-up, there were significant advantages for CBT and supportive counselling over usual care on symptom measures, but not on relapse or rehospitalisation; there were no differences in the

effectiveness of CBT and supportive counselling [394]. It seems, therefore, that provision of either supportive counselling or CBT during the acute phase can have immediate and long-term effects on symptoms, with CBT having additional effects in the immediate term.

The ACE project entailed the provision of cognitive therapy to young people in the acute phase of illness (within 4 weeks of acceptance into a first-episode service) in the form of a maximum of 20 sessions of therapy over 14 weeks. The therapy focused on a hierarchy of presenting problems such as risk, positive psychotic symptoms (if present and distressing), comorbidities, negative symptoms, issues of identity (using modules from the Cognitively Oriented Psychotherapy for Early Psychosis [COPE] intervention outlined in

Guideline 3.2.2), and relapse prevention. Further information is available in the ACE manual [395]. The control condition was 'befriending', an intervention that allowed for social contact but not emotional support, with a focus on 'pleasant chat' about neutral topics [392]. Published data from this trial suggest that, at mid-treatment, ACE outperformed the control condition of befriending with respect to functioning, but not symptomatology; however, at 12-month follow-up, there was no significant difference between the ACE and befriending groups, with the befriending group 'catching up' with respect to functioning. As in the SoCRATES trial, this data suggests that CBT may lead to better early recovery, but that other interventions (e.g., supportive therapy/ befriending) may be of similar benefit later in the recovery process.

Recommendations

- 3.2.1.1 All young people with first episode psychosis should be seen by a doctor within 48 hours after entry into the early psychosis service. GPP
- 3.2.1.2 All young people should be seen by a consultant psychiatrist within one week after entry to service. GPP
- 3.2.1.3. All young people should be seen at least twice-weekly in the acute phase by the acute treating team, or case manager, and a doctor. GPP
- 3.2.1.4 All families should be seen or contacted at least weekly in the acute phase by the acute treating team or case manager. GPP
- 3.2.1.5 Antipsychotic medication should not be used during the first 24–48 hours of treatment in young people with first episode of psychosis, to facilitate assessment. GPP
- 3.2.1.6 SGAs should be used in preference to FGAs. GPP
- 3.2.1.7 Side effect profile should guide choice of SGA. GPP
- 3.2.1.8 Potential side effects (including metabolic side effects, weight gain, extrapyramidal motor symptoms, and sexual side effects) should be noted and discussed with young people within a shared decision making approach, prior to pharmacotherapy commencement, and then monitored, managed and addressed early, with a prevention model if possible (e.g., weight

- management strategies implemented prior to treatment initiation). GPP
- 3.2.1.9 Affective and non-affective psychosis should be distinguished to enable appropriate treatment (i.e., appropriateness of use of a mood stabiliser). GPP
- 3.2.1.10 Pharmacological treatment should proceed with a 'start low, go slow' approach. GPP
- 3.2.1.11 Adherence should be monitored and explicitly addressed where necessary. GPP
- 3.2.1.12 Long-acting injectable antipsychotic medications may be offered as an alternative to oral medication within a shared decision making approach in which young people are fully informed about, and collaborate in treatment decisions. GPP
- 3.2.1.13 Benzodiazepines may be a useful adjunct in florid psychosis for sedation. GPP
- 3.2.1.14 Treatment of the primary psychotic disorder should be prioritised unless comorbidity leads to high levels of risk to self or others or clinical judgement considers that the comorbidity has a major impact on the primary psychotic disorder (e.g., cannabis dependence).
- 3.2.1.15 With the exception of the above situations, polypharmacy should be avoided, specifically the use of multiple antipsychotics. GPP
- 3.2.1.16 CBT^A, supportive therapy^B, or befriending^B should be provided during the acute phase, with CBT having the most immediate benefit.

Guideline 3.2.2. Early recovery

Background

The focus of management during the recovery period (features outlined in Box 13) is not only to treat symptoms (a necessary but insufficient criteria for recovery [396]), but also to:

- manage comorbidity, including substance abuse
- engage the person in their own treatment
- increase adherence to treatment
- help the person understand their experience of illness
- assist the person in reconstructing and reorienting their lives (including helping them re-engage with educational or vocational activities)
- provide the person with a sense of empowerment, rather than passive acceptance of a withdrawn and disabled role [397]
- prevent relapse
- assist the young person to develop resources for the future.

For some people, a paced approach is appropriate, with one stressor or step tackled at a time in working towards realistic and achievable goals. Contact with the treating team may be less frequent than during the acute phase, but still needs to be regular.

Box 13. Essential features of the recovery process [32]

Psychotic symptoms can subside relatively rapidly with medication, but in some cases this may take several months. The concept of 'relapse' is categorical (that is, relapse either occurs or does not occur) and is a poor way of describing the fluctuations in symptoms that can occur during recovery.

Recovery is a convalescent period of recuperation and readjustment.

Recovery is an active process for young people with psychosis and their families.

As part of recovery, people with psychosis should develop an understanding of what has happened to them, integrate the experience and restore self-esteem.

There may be a plateau in recovery when little appears to be happening. This may reflect a period when the young person is struggling with subtle psychotic symptoms or has been depressed or 'shut down'.

For some young people, a rapid return to their normal environment and responsibilities is helpful and may minimise stigma and inappropriate illness behaviour. For others, there is a risk of precipitating a second episode of psychosis if reintegration is too rapid. Predicting the best approach is difficult. An insidious onset of illness and a long duration of untreated psychosis with a slow remission may suggest that a gentle reintegration is preferable. It is important to support the young person in pursuing their goals and not to take a patronising attitude of 'clinician knows best'

Families and friends need to understand that this plateau is part of recovery; they need to keep the environment calm, positive and free of distress. Continuing their usual activities may help to alleviate pressure on the person. Families and friends may also need support with this from the clinical team.

Box 14. **Ensuring adequate response to treatment**

Adequate response to treatment is enabled by adopting principles regarding frequency and type of contact during early recovery, such as:

- People are seen by a case manager weekly during the early recovery phase
- People are seen fortnightly by a doctor during the early recovery phase
- Families are seen or contacted at least fortnightly during the early recovery phase
- Families are seen with the case manager and person being treated to ensure consensus regarding action plans

Medication

Many principles of medication management are outlined in Guideline 3.2.1, 'The acute phase'. During the early recovery phase, frequent progress reviews are likely to assist in early identification and management of poor efficacy, poor tolerability, and problems with adherence. If adherence difficulties are pronounced during this phase, these should be addressed (see Principle 6 on page 60). LAIs may be considered, consistent with the general preference in FEP for SGAs. In this instance, frequent risk-benefit monitoring is required. There is no consensus on the optimal duration of maintenance antipsychotic treatment following the remission of psychotic symptoms [183]. Guidelines for treatment of young people with FEP note that duration of maintenance therapy in current clinical practice ranges from 1 year to an indefinite period, and recommend that consideration be given to the severity of the initial episode and the response to treatment when deciding how long to continue antipsychotic maintenance [13, 183].

Among people with first episode mania, after the acute treatment phase, a continuation phase of 2 to 6 months may be necessary using the same medications as was used in the acute phase, but in more tolerable doses [398]. A decision about maintenance treatment that involves the person being treated and their family may be considered after this phase, and should consider factors such as the risk of relapse, family history of major mood or psychotic disorders, side effects related to medications, including their impact on the persons' quality of life, and the risks to them or

others with a relapse. Monotherapy is the gold standard for maintenance treatments, with mood stabilisers considered first [399].

For people with a first episode of psychosis who present with severe depression with psychotic features, the continuation phase is conceptualised to continue until the person achieves symptom recovery to the premorbid state [400] and maintenance therapy after this point for relapse prevention. The role of antipsychotic medications beyond the continuation phase is unclear. Maintenance treatments are often considered based on similar considerations as for bipolar disorders/first episode mania. The availability of, and response to, psychological interventions for major depression may also influence the decision regarding use of medications in the maintenance treatment phase. For treatment resistance in acute and maintenance phases of bipolar or depressive disorders, escalating treatment options should be considered [400].

Psychological therapies

At least three psychological interventions have been developed specifically examining recovery from FEP. The first, COPE, focuses on psychological impact of the psychotic disorder on the sense of self rather than symptom profile (c.f. studies focusing on positive symptoms and distress associated therewith, e.g. [401]). COPE consists of four phases, outlined in Box 15; further information on COPE is available in the COPE manual [402].

An RCT of this intervention (n=80) found that the COPE group scored better on adaptation to illness, quality of life, and insight, with lower scores for negative symptoms. However, mediumterm advantages seem fairly circumscribed (at 12-month follow-up, limited to the degree to which the young person has integrated the psychotic experience or is using a 'sealing over' coping style [403]) and there are no clear advantages over the provision of a specialist service only at 4-year follow-up [404].

Box 15. Phases of COPE

Engagement

Develop a therapeutic relationship

Assessment

Develop an understanding of the young person being treated's explanation of disorder and of psychosis in general

Adaptation

Promote an adaptive style of recovery from psychosis, with a focus on helping the young person comprehend the stress-vulnerability model, reducing distress associated with altered self-perception post-psychosis and the possibility of ongoing vulnerability

Prevention and treatment of secondary morbidity

Prevention and management of secondary issues such as depression, anxiety, and stigma [405, 406]

A second intervention is described in Jolley et al. [407]. This intervention, focusing on the adjustment process rather than the acute phase of illness, includes emphasis on:

- processing experiences of psychosis
- making sense of these experiences with reference to a personal formulation of illness that is as non-stigmatising as possible
- coming to terms with loss and change as a function of illness, and generating realistic plans for the future that are also imbued with hope and optimism
- preserving social, occupational, and education functioning or rapid re-engagement with these.

A very small RCT (n = 21) found at 6-month follow-up that those receiving this intervention spent less time in hospital than those receiving treatment as usual [407].

More recently, Waldheter et al. [408] developed the Graduated Recovery Intervention Program (GRIP), an intervention that focuses specifically on three domains of recovery in FEP: symptom improvement; optimism and self-efficacy with respect to illness; and functional recovery (including meaningful relationships and academic/occupational functioning). With an overall focus on identifying and working towards personal goals to engender a sense of hope and optimism, and recruiting external supports to maximise engagement, GRIP comprises four phases:

- engagement and wellness management (including psychoeducation, goal-setting, symptom management and relapse prevention, using strategies such as motivational interviewing and behavioural tailoring and identification of relapse signatures and triggers, with the development of coping strategies)
- 2. substance use (using motivational interviewing strategies)
- 3. persistent symptoms (covered in further detail in 'Late recovery')
- functional recovery (including social skills and social support, role functioning, recreational activity, and self-esteem/stigma, using external support agencies, social skills training, and activity scheduling, focusing on positive qualities).

All participants receive the first two phases of treatment (across 12 sessions), regarded as the 'minimal effective dose' given they cover critical illness management issues. Clinicians collaboratively determine with the person being treated whether additional treatment is necessary and further treatment is then individually tailored to the person.

Only one randomised study to date has explored GRIP's effectiveness [409]. Results suggest some clinical and psychosocial benefits, especially with respect to levels of positive symptoms and quality of life comparing pre- and post-intervention for treatment completers. Moreover, the intervention was well-tolerated, as evidenced by good attendance and low attrition. However, the small sample-size (n=46) and the lack of rater blindness for two functional outcome measures militate against any conclusions regarding effectiveness.

There is mounting evidence supporting the efficacy of psychological therapies that target recovery from a first episode psychosis. Initial studies report cognitive remediation therapy improves global and social cognition [410], social functioning [411] and positive symptoms [412], while other studies suggest vocational recovery is achieved through supported employment programs for individuals with FEP [413]. It seems particularly appropriate to consider offering treatments that recognise the impact of illness on the sense of self, and consider the possibility of relapse and plans for this (see the following section for further information on relapse).

Recommendations

3.2.2.1 Treatment response and adherence should be regularly reviewed. All young people with early psychosis should be seen at least weekly by a case manager, and at least fortnightly by a doctor, in the early recovery phase. GPP

3.2.2.2 All families should be seen or contacted at least fortnightly during the early recovery phase. GPP

3.2.2.3 Early response to antipsychotic medication should be considered as a prognostic sign. GPP

3.2.2.4 CBT interventions may be indicated in this group, as it may speed up recovery, reduce period of hospitalisation^D, enhance short-term adaptation to illness^B, reduce positive symptoms^D, and improve personal goal attainment.^D

3.2.2.5 The possibility of relapse should be discussed with young people and their families, along with education regarding early warning signs and the development of a 'relapse action' plan. GPP

Guideline 3.2.3. Relapse

Background

Psychotic symptoms will remit in most young people with a first episode of psychosis, but there is a high rate of subsequent relapse. A systematic review and meta-analysis [414] reported the pooled prevalence of relapse rates (positive symptoms) were 28% at 1-year follow-up, 43% at 2 years, and 54% at 3 years [414]. A young person may experience a number of 'early warning signs' 1-4 weeks preceding a relapse [415]. Relapse can range from mild to severe, and the severity of symptoms can fluctuate. Given these high rates of relapse in FEP, it is important to avoid the risk of providing unrealistic reassurance regarding prognosis for fear of being pessimistic or affecting young people's hopes for recovery. Instead, the young person and their family should be prepared for risks ahead and levels of anxiety, hopelessness, or denial of risk monitored [156].

A number of factors may increase the risk of a young person experiencing a relapse of psychosis [156], including non-adherence to medication, substance use, poor premorbid adjustment and 'critical' comments from family or supports [414]. Assessment of such factors and a formulation of relapse risk can guide future treatment. There are benefits in educating the young person, family and friends to recognise early warnings signs of relapse and develop strategies to respond [257].

Medication

A recent meta-analysis outlines the evidence for pharmacological strategies in preventing and treating relapse in FEP [416]. Some limited data suggests that FGAs may be more effective than placebo in preventing relapse in FEP. There have been no studies testing the effectiveness of SGAs

versus placebo in relapse prevention. Two metaanalyses involving 1055 FEP participants [417] and 4504 schizophrenia remitted participants [418] suggest that SGAs as a class (but not individual SGAs to date) may be more effective than FGAs in preventing relapse. Conversely, Leucht and colleagues [419] reported no difference in relapse rates in schizophrenia participants between FGAs and SGAs. However, the pooled analysis by Alvarez-Jimenez and colleagues [417] is exclusive to FEP cohorts and thus more relevant here. The authors conclude that further studies comprising heterogeneous trials with larger samples are required to establish the superiority of SGAs over FGAs to prevent relapse in FEP.

Psychological interventions

Relapse is almost always preceded by non-psychotic symptoms such as anxiety and depression and low-level psychotic symptoms (see Gumley et al. 2003 [420] for a review). The modal period in which changes in cognition, emotion and perception transform into psychotic symptoms is 4 weeks [421]. Approximately 60–80% of young people with psychosis will experience an acute relapse, while 20–30% will experience recurrent symptoms [414, 422]. Families as well as young people may assist in early identification of risk factors for relapse.

A meta-analysis and systematic review of three RCTs comparing specialist FEP programs with treatment as usual (n=679) reported specialised FEP intervention was significantly more likely to prevent relapse. Specialised FEP intervention programs routinely incorporate psychological interventions to enhance coping and recovery. In addition, specialised FEP interventions achieved lower attrition, less likelihood of hospital readmission [16] and improved psychopathology

[423, 424]. The specialised interventions were delivered by multidisciplinary teams, based on assertive outreach principles and included cognitive behavioural therapy, family counselling, and vocational strategies tailored to the needs of the people with early psychosis. Another study [425] combined individual and family interventions (the former implemented fortnightly over a 7-month period and including intervention strategies listed in Box 16). This study reported that, at the cessation of the intervention, relapse rates were lower and time to relapse was longer for those receiving the intervention compared with those receiving treatment as usual. However, these differences were not maintained at 18, 24 or 30 month follow-up [426]. More studies are required to ascertain whether longer treatment duration will result in sustained, longer-term relapse prevention. Similarly, a 2010 Cochrane review[427] showed that interventions with families of people with schizophrenia may decrease their frequency of relapse, reduce hospital admissions and encourage adherence to medication, although the authors conclude more research is required in this area.

Box 16. Psychological relapse prevention strategies may include:

- Developing a shared, written formulation regarding relapse risk
- Developing an awareness of risk factors for relapse and how to minimise or manage them
- Identifying a relapse signature of early warning signs for relapse (with the individual and their family) and developing a relapse plan
- Treatment of comorbid substance use and psychiatric disorders and managing nonadherence to treatment
- Parallel individual and family intervention focused on relapse prevention (given links in people with more chronic illness between expressed emotion and outcomes) [427]
- Supervision specifically focusing on relapse issues (see Gleeson et al. [428] for further details)
- Family interventions

Recommendations

- 3.2.3.1 Medication should be recommenced or increased at early signs of relapse. GPP
- 3.2.3.2 The advantages of maintenance antipsychotic therapy in relapse prevention should be weighed against any impact of side effects on functioning. GPP
- 3.2.3.3 Relapse prevention strategies (including more regular review and provision of information about rapid access to care) are particularly indicated if medication dosages are decreased or medication ceased.^{GPP}
- 3.2.3.4 Specialised FEP interventions and combined family and individual CBT specifically focusing on preventing relapse should be used.^B

Guideline 3.2.4. Late/incomplete recovery, medication discontinuation, and discharge

Background

'Incomplete recovery' refers to young people who despite having access to adequate treatment have not recovered from the onset of a psychotic episode [147]. This includes young people who are 'treatment resistant' (not responding to evidencebased treatments) and 'resistant to treatment' (treatment non-adherent individuals), with regard to positive and negative symptoms [429]. The prevalence of incomplete recovery ranges from 10 to 50% [430]. Those likely to have a problematic recovery can often be identified as early as 3-6 months after an acute episode [32] (see Box 17 for ways to identify incomplete recovery). Predictors of incomplete recovery include a long DUP [431, 432], a diagnosis of schizophrenia [433], and poor premorbid psychosocial functioning in childhood and adolescence [434]. This group must be distinguished from those who have not been adequately treated with first-line pharmacological and psychosocial interventions. A key implication of the DUP literature is that problematic or incomplete recovery should be identified and managed early.

Box 17. Early identification of incomplete recovery and relapse can be facilitated by:

- Comprehensive case review by the treating team every 3 months after entry to the service
- Fortnightly contact between the case manager and the young person during late recovery
- Monthly contact between the doctor and young person during late recovery
- Monthly contact between the case manager and family during late recovery

Medication for incomplete recovery

There is a subset of people with FEP who do not respond to first- or second-line antipsychotic treatment. The guidelines for incomplete recovery in schizophrenia (including the Texas Medication Algorithm Project [435] and the PORT group [436]) have received widespread acceptance. A more recent, four-stage treatment model for pharmacological intervention is also outlined in Lambert and colleagues' [437] report. Broadly, the four stages comprise: 1) identify the domain of treatment resistance; 2) implement the best-treatment option based on affected domain; 3) consider clozapine maintenance treatment (discussed below); and 4) antipsychotic combination strategies.

One pilot study investigated the relative and combined efficacy of a 12-week course of clozapine and CBT treatment for reducing persistent psychotic symptoms following a first episode of psychosis [438]. The CBT treatment, 'STOPP'[439], was designed to target enduring positive symptoms. A significantly greater proportion of individuals receiving clozapine achieved symptomatic remission (52%), relative to those receiving thioridazine (35%) at 3 month follow-up. A Cochrane Collaboration review concluded clozapine is the most effective antipsychotic medication for treatment-resistant psychosis [440]. Clozapine may therefore be considered when remission does not occur despite the sequential use (with good adherence) of two antipsychotic medications. Although response to clozapine should emerge within 8 weeks of reaching a therapeutic dose, a trial of 6 months is recommended [283].

There is limited empirical evidence beyond case reports on pharmacological strategies should clozapine be unsuccessful in managing incomplete recovery in FEP [283]. Low-dose (100–300mg) amisulpride may be beneficial for negative symptoms [441, 442]. In clozapine-resistant individuals with schizophrenia, augmentation with a second antipsychotic is common. However, two reviews conclude there is little evidence supporting this practice, and that it can result in an increased risk of side effects [443].

Electroconvulsive (ECT) therapy has been investigated as an augmentation strategy for clozapine, and despite methodological limitations, limited clinical studies in young people suggest that ECT may be an option for medicationresistant schizophrenia [444]. A combination of antipsychotic medication and ECT significantly reduced the length of hospital stay compared with antipsychotic medication alone [445], and improved psychopathology and functioning [446] in young people with treatment-resistant FEP. ECT also appears to be safe, with one study reporting no differences in neuropsychological variables at a 2-year follow-up in adolescents with schizophrenia undergoing ECT (relative to those who did not receive ECT) [447]. However, given that the long-term efficacy is unknown and the stigma attached to ECT, it should only be used (in combination with antipsychotics) as a last-resort for resolving acute psychosis, within a shareddecision making framework.

Psychological interventions

A recent meta-analysis [448] comprising 12 RCTs reported CBT improved general and positive symptoms in individuals who had not responded to medical treatment. Heterogeneity in CBT techniques makes identifying the 'active ingredients' difficult. Despite this, common focus areas include psychoeducation, normalising psychotic symptoms, cognitive restructuring of activating events and subsequent beliefs, and developing coping strategies to facilitate relapse prevention [448]. Few interventions have been specifically designed for those with FEP who experience prolonged recovery. Edwards and colleagues have developed an intervention (Systematic Treatment of Persistent Psychosis, or STOPP therapy) to address prolonged recovery in the FEP group [449].

This intervention includes four phases:

- 1. developing a collaborative working relationship
- 2. exploring and coping with psychosis (including discussing the person's subjective response to psychosis and increasing their knowledge, considering and implementing strategies to manage and treat symptoms, and learning to tolerate the emotionality associated with managing psychotic phenomena)
- strengthening the capacity to relate to others (with themes of increasing the person's sense of integration by developing awareness of personal strengths, their capacity to interact with others by questioning psychotic beliefs of others), and
- 4. finishing and moving on.

Results for a pilot RCT examining the efficacy of STOPP and clozapine [438] suggested that both clozapine and STOPP may have an early beneficial effect on both positive and negative symptoms, which appears to be sustained for at least 3 months after the end of therapy.

The GRIP intervention outlined above also has a phase focusing on persistent symptoms, with the goal to reduce distress or impairment caused by these. The specific interventions employed depend on the symptom domain, as outlined in Box 18. These interventions draw on interventions developed for people with more chronic psychotic disorder [386, 387, 394, 450, 451]. Again, however, there are limited empirical data on the effectiveness of these interventions in the FEP group.

Box 18. Possible interventions for persistent symptoms: the GRIP approach [428]

Delusions

- Increasing cognitive flexibility through generating alternative explanations
- Engaging in behavioural experiments to evaluate the veracity of one's beliefs
- Examining the internal consistent of beliefs Auditory hallucinations
- Enhancing coping strategies (e.g., managing antecedents differently)
- · Modifying interpretations of voices
- Behavioural experiments

Negative symptoms

 Targeting consequences of these, such as low activity and social withdrawal, through behavioural activation and cognitive restructuring

Thus emerging evidence suggest psychological interventions may improve psychopathology for medication-resistant individuals with schizophrenia [452-454] and early psychosis [455]. Although research investigating psychological interventions for incomplete recovery in early psychosis is embryonic, it constitutes good clinical care to provide intervention at this stage.

Withdrawal of medication

The process of withdrawing medication must be carried out slowly (over a number of months) and with careful monitoring that extends for several months after medication ceases. The majority of treatment guidelines in early psychosis advocate continuous treatment with antipsychotic medication for 12 months following a psychotic episode to minimise the risk of relapse, and this approach is supported by existing research evidence. Poor medication adherence is the strongest predictor of relapse, followed by substance use and a critical family environment [456]. In traditional mental health services, discontinuation of antipsychotic medication has resulted in relapse rates of 80-100% [457-459]. However, the focus on preventing relapse as the primary treatment target in FEP is beginning to be questioned [460]. Recently, functional recovery has begun to be viewed as the best treatment goal for early psychosis services, as it enables young people to live physically healthy and

meaningful lives. Evidence is now emerging that very low-dose antipsychotic medication following a remission in psychotic symptoms is associated with better functional capacity [461]. The onus is on the treating team, including medical staff, to try to find the lowest possible dose of antipsychotic medication to achieve a remission in symptoms and carefully consider the merits of maintenance medication or medication withdrawal. Initial response to treatment, diagnosis (affective/non affective psychosis), the impact of antipsychotic side effects on functioning, and good and bad prognostic factors (such as long DUP and poor premorbid functioning) should guide decisionmaking about medication continuation or withdrawal.

Transitions in care and discharge planning

Transitions in care can represent a period of increased risk for young people with early psychosis, including increased risk of suicide, disengagement, relapse and further decline in functioning [243, 462]. Discharge from the service in particular can be a time of heightened risk.

Transition planning: inpatient to community

Having a clear transition plan for each person who is discharged from inpatient care has been shown to [462, 463]:

- reduce the risk of readmission
- increase the probability of adherence to medication
- improve mental health outcomes.

Elements of transition planning that are effective include: prompts to young people to engage with the new service (letters or telephone followups); assigning a case manager while the young person is still an inpatient; compiling a pharmacy discharge plan; and offering peer support to the young person [462]. Providing information to the family as agreed with the young person is also vital.

Transitioning strategies

Linking young people with the case management service in a structured way can increase the likelihood of their engaging with outpatient community care during the transition phase.

Effective strategies include: [464, 465]

- a crossover period of care where the young person begins or visits the outpatient service before they are discharged from inpatient care or where the case manager meets with the person on the inpatient unit
- treatment within the inpatient unit is planned in collaboration with the outpatient community team at the commencement and at regular intervals, at a minimum of weekly clinical case reviews and particularly prior to discharge
- clear communication channels, for example between inpatient and outpatient staff, about the plans for discharging the young person
- a dedicated clinician who acts as a liaison between acute and non-acute services.

There is a risk that services and clinicians perceive a young person who is out of the acute phase to be no longer in crisis and therefore no longer at high risk. This may result in a lessening of clinical support or attention [466]. It is therefore crucial that services remain vigilant of suicide risk at this point in a young person's care. Reviews of their risk assessment and mental state examination are paramount. See Box 19 for factors related to discharge from acute care that increase risk of suicide.

Box 19. Suicide risk following discharge from acute care

Up to 75% of people with FEP who commit suicide do so in the early recovery phase, usually with a few months of being discharged from an inpatient unit [466].

The increased risk of suicide at this time may be a result of [466]:

- someone having newly gained insight into their condition
- feelings of hopelessness or stigma
- significant losses (e.g., of employment or relationships) as a result of symptoms of psychosis
- persistent distressing symptoms of psychosis
- the presence of post-psychotic depression
- negative symptoms
- the effects of treatment or service interactions (e.g., traumatic pathway to care, side effects of medication, poor continuity of care)
- remission of symptoms that in the acute phase prevented a person from acting on suicidal thoughts (e.g., acute mania, thought disorder and negative symptoms)
- hospitalisation due to a relapse, which may mean a person is particularly despairing.

Discharge from a service

Discharge and closure planning are integral components of the late recovery phase. Timing of the cessation of treatment will be influenced by factors including the level of remission, DUP, whether positive symptoms are persisting, comorbid substance use, ongoing stressful life circumstances, and the level of functioning in a normal living situation [32]. Linkages should be established for a person being discharged with a local GP, private psychiatrist or area mental health service, and social and vocational services. Box 20 outlines minimum standards relating to referral to new treating teams following discharge.

Box 20. Community care discharge minimum standards

- Discuss discharge from the commencement of treatment.
- Develop a specific discharge plan in collaboration with the person receiving treatment and their family at least 3 months prior to discharge.
- Share this plan with the person's identified supports, such as family members, their GP or private psychiatrist or psychologist or other mental health service.
- Advise the person, family, and any relevant service providers about how to re-access mental health services if necessary in the future, and provide with emergency contact numbers.
- Contact new treating team at least 3 months prior to discharge to plan the discharge process.
- Conduct a period of transition and handover to the new service provider.

Recommendations

- 3.2.4.1 All young people being treated should be seen at least fortnightly by a case manager, and at least monthly by a doctor, during the late recovery phase. GPP
- 3.2.4.2 All families should be seen or contacted at least 2-monthly by the treating team during the late recovery phase. GPP
- 3.2.4.3 People with persisting positive or negative symptoms should be identified early. GPP
- 3.2.4.4 Clozapine should be considered for those who have not responded to adequate trials of two antipsychotic medications, of which one is a SGA.^A
- 3.2.4.5 After resolution of positive psychotic symptoms, antipsychotic medication may be continued for 12 months or more. A shared decision making approach and a comprehensive evaluation of the risks and benefits of ongoing medication in each particular case should inform treatment decisions.

- 3.2.4.6 CBT should be considered as an adjunctive therapy during late/problematic recovery. GPP
- 3.2.4.7 Families of young people with a slow or difficult recovery or frequent relapses may benefit from more intensive and structured interventions, emphasising problem solving and communication skills. GPP
- 3.2.4.8 Young people with early psychosis should have their risk regularly reviewed by clinicians, particularly during transitions from acute care and at discharge from the service. GPP
- 3.2.4.9 Clinicians should clearly communicate and document a discharge plan that is shared with the young person, their family, their GP and the new service provider at least 3 months prior to discharge. GPP
- 3.2.4.10 Clinicians should assist young people in their care with orientation and engagement with future treatment providers, including a visit and clinical handover to the designated clinician, such as a GP, or other mental health service clinician. GPP

Guideline 3.3. Early psychosis treatment across all phases

Many key features or components of early psychosis treatment apply regardless of phase of psychotic illness. Many of these reflect good clinical practice with clients of mental health services generally or young people more particularly. These features and components are listed in Box 21 and described in the following guidelines.

Box 21. **Key features and components of early psychosis treatment across all phases**

Engagement

Physical health

Sexual health

Case management

Functional recovery

Trauma

Integrated treatment

Least restrictive treatment

Family involvement

Goals as guides to treatment

Group programs

Psychoeducation

Suicide prevention

Substance use

Treatment of psychiatric comorbidity

Miscellaneous psychological therapies

Youth participation and peer support

Family participation and family peer support

Guideline 3.3.1. The importance of engagement

Engagement is crucial in all forms of psychiatric treatment, with the strength of the therapeutic alliance a moderate-to-strong predictor of outcome, regardless of therapeutic approach [467], including with young people [468]. Effective engagement at the time of the initial assessment can expedite the formation of a therapeutic alliance. General psychotherapeutic skills enable clinicians to gain a better understanding of a young person and, in conjunction with medication, form the foundation for more specific recoverypromoting strategies. Techniques for enhancing engagement are listed in Box 22.

Recommendation

3.3.1.1 Engagement should be prioritised as the foundation of early psychosis treatment. GPP

Box 22. 10 Techniques to enhance engagement

- Communicate to people that they are being listened to and treated seriously
- Offer practical help
- Prioritise working with the person's primary worry and source of distress
- Be flexible with timing and location of treatment as far as possible
- Explain the process of treatment
- Provide information and education about symptoms
- Work with family members if indicated
- Set goals collaboratively

(Phillips & Francey, 2004 [2])

Guideline 3.3.2. Physical Health

Background

People with psychosis can face a reduction in life expectancy of up to 20 years compared with the general population. This reduction is accounted for in part by poor physical health, such as cardiovascular disease [469]. Poor

cardiometabolic health is prevalent among people with schizophrenia, and is a result of a mixture of factors, including antipsychotic medication-induced weight gain and lifestyle-related factors such as poor diet, high smoking rates and reduced physical activity [470-473]. In 2010, the second Australian national survey of psychosis, which examined adults with a diagnosed psychotic disorder, found that 72% of participants were overweight or obese, approximately 55% met the criteria for the metabolic syndrome (see Box 23) and 96% reported low physical activity levels [474], far lower than the general population [475]. There is also evidence that people with psychosis are at greater risk of developing diabetes [476].

Box 23. The metabolic syndrome

The metabolic syndrome is defined by the International Diabetes Federation as a cluster of risk factors that are associated with the development of cardiovascular disease. These risk factors are diabetes and raised fasting plasma glucose, abdominal obesity, raised cholesterol and raised blood pressure. The full diagnostic criteria and further information about the metabolic syndrome can be found on the International Diabetes Federation website (http://www.idf.org/

Weight gain and obesity

metabolic-syndrome).

Weight gain is a well-known side effect of almost all antipsychotic drugs, with clozapine and olanzapine showing the greatest risk [477] (see Table 10 for antipsychotic-elicited weight gain potential). The maximal increase in body weight normally occurs during the first couple of months after initiation of treatment [6], with some data suggesting this plateaus over a time period between a few months and up to 4 years [478, 479]. Early identification and intervention in weight gain is important, including considering change of pharmacotherapy. A systematic review and meta-analysis suggests that a range of psychosocial interventions including group and individual treatment, CBT and nutritional counselling - are effective in reducing or attenuating weight gain compared with treatment as usual [480].

Table 10. Comparative potential of antipsychotics to cause weight gain [481]

Antipsychotic	Potential for weight gain
Amisulpride	+
Aripiprazole	+
Clozapine	+++
Haloperidol	++
Olanzapine	+++
Paliperidone	++
Quetiapine	++
Risperidone	++
Ziprasidone	+

Risk of weight gain rated as: + low, ++ medium, +++ high

Extrapyramidal motor symptoms (EPMS) and tardive dyskinesia

The risk of EPMS and tardive dyskinesia is generally low in the therapeutic dose range for SGA medication [482, 483], relative to FGAs [362]. Use of SGAs is therefore a key preventive strategy, as is early identification of motor side effects by weekly assessment of acute EPMS and akathisia until medication dose is stabilised. Regular assessment of tardive dyskinesia is recommended (6-monthly in the case of FGAs and yearly in the case of SGAs) [159].

Sexual side effects of medications

See Guideline 3.3.3, 'Sexual health', on page 79.

Screening

The routine cardiometabolic health screening of all people with early psychosis is recommended to guide detection, prevention and early intervention of physical health issues [484]. Initial screening should occur upon someone's entry to a service to gather baseline information about their cardiometabolic health. This should be repeated at 1 month, and should continue at least every 3 months for the duration of their treatment. The monitoring cycle should begin again whenever there is a change in medication. A careful record of all medications and side effects should be maintained and regularly shared with the person's GP.

At a minimum, cardiometabolic health screening should incorporate:

- waist circumference
- weight

- height
- BMI
- blood pressure
- level of physical activity
- smoking (cigarettes per day)
- fasting pathology (lipid profile, glucose, liver function tests, vitamin D)
- diet.

An algorithm for metabolic screening and intervention for young people who have been prescribed antipsychotic medication is available on the iphYs website (www.iphys.org.au).

Interventions

Evidence suggests that structured behavioural and lifestyle interventions are effective in reducing antipsychotic induced weight gain [480, 485, 486], and are acceptable to young people receiving care [485]. A recent study by Curtis and colleagues (2015) evaluated a 12-week lifestyle and life skills program to prevent antipsychotic-induced weight gain in FEP [485]. Only 13% of participants receiving the program experienced clinically significant weight gain, relative to 75% in the standard care group.

Lifestyle interventions

Physical activity

Physical exercise can help prevent or address weight gain and metabolic problems in people with schizophrenia [487]. Guidelines and information sheets for recommended physical activity can be downloaded from the Australian Government Department of Health: http://www.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-phys-actguidelines#apa1317.

Diet

Individuals with psychosis tend to have poorer diets than the general population [488-490]. Helping people with early psychosis and their families understand nutrition labels, create shopping lists and develop healthy cooking skills improves diet quality and prevents weight gain. Weight management education (food quality and portion control) may also minimise weight gain [485].

For a healthy diet, see the Australian dietary guidelines www.eatforhealth.gov.au.

Oral health

Despite being an important part of physical health [491], oral health has received little attention in early psychosis. Dental disease is linked with coronary heart-disease, stroke, diabetes [492-494] and it affects eating, speech and other social and psychological domains of life [491]. People with severe and enduring mental health problems are 3.4 times more likely to lose all their teeth compared with the general population [495]. They are also significantly more likely to have decayed or missing teeth and plaque sores [496]. Contributing factors can be lifestyle choices, amotivation, dental costs, difficulty accessing health care, and psychotropic medication [497, 498].

Clinicians can conduct brief oral hygiene assessments that do not require any dental training. Evidence based oral health promotion resources which summarise the most effective health promotion strategies for the prevention of oral health problems are available from government websites (e.g., https://www2.health.vic.gov.au) and can be utilised by clinicians. Specifically, clinicians can provide infomation about oral hygiene (i.e. morning and evening brushing, avoidance of sugars, smoking cessation, encourage regular dental check-ups and address dental anxiety, if present).

Tobacco and alcohol use

Heavy alcohol use is more common in people with psychosis than in the general population [475]. Rates of alcohol misuse in FEP varies between 10 and 33%, but studies have not found any correlation between alcohol use and positive symptoms [499] or outcome [217]. To date, no studies have investigated treatment for alcohol dependence or abuse in early psychosis. However, one study [500] reported that routine care integrated with motivational interviewing, CBT, and family intervention was an effective intervention (relative to routine care) for individuals with comorbid schizophrenia and alcohol abuse or dependence.

Tobacco use is given far less attention in the literature than other substances, but is both prevalent and problematic in the early psychosis population. Tobacco is the most commonly used substance by people with mental illness. In Australia, the rate of smoking among young people experiencing a first episode of psychosis has been reported to be as high as 72% [501] – nearly three times that of the general population [502].

Studies in populations with chronic schizophrenia suggest that people may 'self-medicate' with tobacco to reduce negative symptoms [503], which probably acts through the effect of nicotine on dopamine release in the brain. Smoking may also attenuate some side effects of antipsychotic medication including drowsiness [504]. However, in addition to adverse physical effects, smokers with psychosis have higher levels of positive symptoms [505], which increase further on tobacco withdrawal [506]. The half-life of antipsychotic medication is significantly shorter in smokers than non-smokers [507], probably because smoking increases the metabolic clearance of the drugs [508]. Smoking may also increase the risk of tardive dyskinesia [509].

To help quit smoking, the UK's National Institute for Health and Care Excellence (NICE) guidelines for psychosis recommend considering nicotine replacement therapy (NRT), bupropion or varenicline,[510]. Success rates for smoking cessation are often increased when psychological and behavioural therapies are combined with pharmacotherapy [511, 512].

Medication interventions

Specific medication may be indicated where lifestyle interventions have been trialled for at least 3 months and targets for weight, lipids and glucose have not been achieved.

Metformin

Metformin has been shown to be effective in reducing or attenuating antipsychotic-induced weight gain and is considered to be relatively safe and effective in young people [513, 514]. It might also be considered if a young person presents with increased blood glucose, especially when accompanied by central obesity, hypertension and dyslipidaemia and where active lifestyle interventions have not succeeded.[515]

Antihypertensive medication

Antihypertensive medication may also be considered in people who present with persistent high blood pressure and where lifestyle interventions targeting exercise and diet (including salt reduction) have not succeeded.

For people who present with persistently elevated blood lipid levels despite lifestyle interventions, statins may be prescribed to reduce future cardiovascular risk. Fibrates might be considered for elevated triglycerides [516].

Recommendations

3.3.2.1 Routine metabolic screening should guide intervention, and prevention of physical ill-health must be prioritised as part of routine early psychosis treatment (see http://www.heti.nsw.gov.au for adolescent cardiometabolic health screening protocol) GPP

3.3.2.2 Cardiometabolic screening should occur on entry into service, after medication changes, repeated at 1-month and monitored at least every 3 months. Initial screening points should be repeated after any medication changes. GPP

3.3.2.3 Potential physical side effects (including metabolic side effects, weight gain, extrapyramidal motor symptoms, and sexual side effects) should be noted and discussed with people prior to their commencing pharmacotherapy. Such effects

should be monitored, managed and addressed early, with a prevention model if possible (e.g., weight management strategies implemented prior to treatment initiation) ^{GPP}.

3.3.2.4 Structured behavioural lifestyle interventions should be implemented to improve physical health outcomes for people with early psychosis. GPP

3.3.2.5 Tobacco cessation should be offered routinely to young people with early psychosis. GPP

3.3.2.6 Oral health assessment should form a part of routine assessment using standard checklists that can be completed by non-dental personnel. GPP

3.3.2.7 Where lifestyle interventions prove ineffective after at least 3 months, consider specific pharmacological interventions (e.g., metformin, antihypertensive treatment, statins). GPP

Guideline 3.3.3. Sexual health

Box 24. Definitions in sexual health

Sexual health includes physical, emotional, mental and social wellbeing in relation to sexuality[1]. It is not merely the absence of dysfunction, but encompasses a meaningful, respectful and positive experience of sexuality.

Sexual function is determined by psychological, social and physiological factors and comprises sexual interest or libido, arousal, orgasm, ejaculation and resolution.

Sexual dysfunction refers to disruption in one of the areas (or processes) of sexual functioning (e.g., erectile dysfunction or premature ejaculation in males and orgasmic dysfunction in females [9, 10]).

Background

Sexuality is a fundamental aspect of everyday life. As early psychosis typically emerges in young adulthood, it can disrupt the crucial period when people start to form romantic relationships and explore their sexuality [517, 518]. The prevalence of sexual dysfunction in early psychosis is far greater than in non-clinical populations. Marques and colleagues [519] found sexual dysfunction

was evident in 50% of individuals deemed UHR and 65% of first-episode participants (compared with 21% of non-clinical respondents). UHR individuals who converted to FEP experienced significantly greater sexual dysfunction than the non-transitioning UHR subgroup. Another large-scale study comprising 498 FEP participants reported a positive relationship between (psychotic) symptom severity and severity of sexual dysfunction [520]. In combination, these results suggest young people in early psychosis are at elevated risk of sexual dysfunction, and the risk and severity of sexual dysfunction increases with illness progression.

The association between sexual dysfunction and early psychosis may be due to psychotropic medication [521, 522], psychosocial factors [523], somatic health [524] and psychotic symptoms [520, 525]. Crucially, sexual health is related to functional recovery [523] whilst sexual dysfunction is associated with poorer quality of life [526, 527] and non-adherence to treatment [528]. Sexual dysfunction therefore represents a key focus area within the treatment of early psychosis.

Clinical evidence

More research is needed to understand the higher rate of sexual dysfunction in early psychosis groups, particularly with regard to interventions. Schizophrenia studies suggest sexual dysfunction is a greater imposition on quality of life than

extrapyramidal, sedative and vegetative side effects of antipsychotics [527, 529]. Despite this, young adults rarely report sexual dysfunction. One study [521] found only 37% of psychotic participants reported their sexual dysfunction spontaneously. As such, therapists underestimate the presence and impact of sexual dysfunction on the people they treat [530, 531]. This may explain one study finding that clinicians are often unaware that treatment non-adherence is often related to sexual dysfunction [524]. Importantly, people experiencing schizophrenia [532] and young people at UHR of psychosis [523] are able and willing to discuss sexual and relationship concerns when prompted. However, clinicians can be reticent to discuss sexuality issues [533]. Using structured interviews and self-report questionnaires have been found to increase sensitivity to reports of sexual dysfunction [534]. Thus, routine inquiry into sexual health as part of ongoing assessment is crucial to wellbeing and increasing treatment adherence.

Sexually transmitted infections

Young people are overrepresented in the population with regard to prevalence of sexually transmitted infection (STI) [535]. Shield et al. [536] and Brown et al. [537] determined STI knowledge, attitudes, and beliefs were comparable across FEP, UHR and non-clinical cohorts. However, young people with a first episode of psychosis are less likely to use condoms when compared with young people with no clinical diagnosis [538]. This suggests young people with early psychosis have greater needs for STI prevention.

Antipsychotic medication

In cases where someone is prescribed antipsychotic medication, clinicians should discuss the potential for antipsychotic-induced sexual dysfunction. Baseline sexual functioning should be ascertained to assess potential impact of antipsychotic treatment. Reducing dosage, or switching to an SGA or an antipsychotic with a neutral effect on prolactin levels (i.e., aripiprazole, quetiapine [539]) may avoid negative impact on sexual functioning[10]. However, more well-designed studies are required for robust inferences [540].

Recommendations

- 3.3.3.1 Clinicians need to be aware and informed of sexual health issues and potential dysfunction in early psychosis populations. GPP
- 3.3.3.2 Clinicians should inform young people experiencing sexual dysfunction that sexual difficulties are also common in the general population. GPP
- 3.3.3.3 Clinicians should assess baseline sexual functioning to monitor sexual related side effects of antipsychotic treatment. GPP
- 3.3.3.4 Clinicians should be aware that use a standardised assessment instrument may facilitate open communication about sexual functioning. GPP
- 3.3.3.5 Clinicians should focus on risk-reduction interventions such as condom use. GPP

Guideline 3.3.4. Case management

Background

Case management aims to assist people with mental ill-health navigate the complex elements of their psychiatric care. This extends beyond 'formal' psychiatric treatment to address other needs, such as basic needs (e.g., accommodation, food and employment), physical health issues, broader needs (e.g., family and social relationships, leisure activities) and spiritual needs [541]. Assertive community treatment, typified by, amongst other things, low caseloads, team caseworking, in vivo treatment, assertive engagement, and frequent contact, is the model of case management with the best evidence. It has been shown to reduce lengths of admission and improve engagement with services, independent living skills, compliance with medication and satisfaction with services and treatment [542-544]). There is some evidence to suggest that assertive case management may benefit people with early psychosis more than those with longterm schizophrenia, although methodological problems with this research mean it needs to be replicated before firm recommendations can be made [545].

The goal of the case manager or treating clinician in early psychosis in particular is to promote recovery and to prevent relapse and ongoing disability. This can be achieved through assisting

the young person with early psychosis and their family to understand psychosis and to develop resources that will assist them in the future. The case manager is expected to have a thorough knowledge of psychopathology and to have psychotherapeutic expertise; the case manager is the key psychotherapeutic contact and should use a case formulation, developed in concert with the rest of the treating team, to guide treatment. The case manager provides a point of service accountability, and works in partnership with the treating psychiatrist, who has key clinical accountability. Case managers are also responsible for continuity of care. They should also have links with other specialist providers, as well as existing mental health and community services, being able to utilise them as needed in response to the needs of the young person being treated.

Strengths-based and recovery approaches to case management

A strengths-based approach to early psychosis care and intervention emphasises the future ambitions and goals of the young person receiving care and their personal resources and achievements [546, 547]. This is a different approach to the traditional problem- (or deficit-) based approach, where the focus is on assessment and treatment of symptoms and impairments [546]. The strengths-based approach concentrates on what individual resources the young person brings. It acknowledges that each person brings unique and individual strengths and difficulties regardless of illness. The approach has an intentional focus on what the young person can do, rather than on deficits or difficulties [548].

The strengths-based approach also aims to develop independence and agency rather than dependence on supports, simultaneously acknowledging that all people are interdependent and rely on each other [547]. The community is viewed as an oasis of resources and is the primary setting for all psychosocial interventions [547].

Strengths-based approaches should be incorporated as part of the usual way in which clinicians work with young people with early psychosis and their families. For example, using a strengths-focused assessment when developing goals for intervention encourages the young person and their family to talk about their aspirations and needs rather than just perceived difficulties [546]. Development of a

truly collaborative and respectful relationship with people and families is the cornerstone of the approach. This may include a degree of therapeutic risk-taking and allowing people to be the drivers of their own recovery plans [546]. The young person is the director of the interventions, and the relationship between the young person and their case manager is highly influential [547].

Box 25. Key elements of recovery-oriented practice [549]

Connectedness

Young people who experience early psychosis often lose connections with peers or momentum in developing important relationships. It is an important part of recovery to establish social connections and relationships.

Hope and optimism

A pervasive sense of hope for the future and an optimistic outlook for recovery are important for the treating team to discuss and promote with the young person and their family.

Establishing and consolidating sense of identity

It is easy for young people to become defined by their illness experience. Encouraging the development of identity that incorporates roles as a friend, partner, worker or volunteer, sibling or team-mate is important.

Meaning and purpose in life

It is important to help people to develop roles and engage in activities that are in line with their beliefs and values, and develop a sense of purpose and meaning for the future.

Empowerment

Helping young people to understand what they need or want in their own recovery, and develop the skills or resources needed to gain this is important.

Recovery refers to the individual's personal process of recovery and is not the same as rehabilitation or symptomatic wellness. It refers to the personal, self-defined and non-linear journey towards wellbeing. This is not the same as a reduction in physical and psychological symptoms, but may be associated with it [550]. This model shares many

of the principles of a strengths-based approach, but also emphasises encouraging and supporting the individual's focus on their personal recovery journey, rather than a diagnosis.

Using a 'recovery' model with young people has been criticised on the basis that recovery means returning to a previous state. Given the characteristic flux in young people's development, this would be undesirable. Some terminology used in the recovery literature is based on the experiences of adults with mental illness and does not apply in the same way to young people. It is important that clinicians understand the concept of recovery and recovery-oriented practice and embed this in their work with young people. Though the language may differ, the principles can be adapted to suit the needs and developmental stage of young people. The emphasis should be on helping them develop a meaningful and fulfilling life, rather than treating a return to previous activities as a marker of their recovery (see Box 25).

Shared decision making in case management

Shared decision making is a process that promotes the selection of treatments that is based on both relevant evidence and the preferences of the young person being treated. At its core is the principle that self-determination (i.e. that the young person is able, willing and allowed to make their own decisions) is a desirable clinical goal, and one that young people should be supported to achieve [551].

Shared decision making involves a clinician and the young person being treated working together in a deliberate way to make decisions about the person's treatment. Multiple health professionals, family members and other supports may also be involved. One of the common misperceptions held by mental health professionals is that shared decision making is simply 'collaboration', and that this is something that is already done in day-today practice. Although shared decision making is a collaborative approach, and engagement and psychoeducation are all used in shared decision making, these practices alone are not enough to be classified as shared decision making. Shared decision making is a conscious, semi-structured approach to helping young people make decisions about their treatment, based on the most relevant evidence and their unique needs, preferences and values.

Much of the evidence for the efficacy of shared decision making with regard to outcomes comes from studies in physical health areas. The evidence base in mental health is still small, and more research is needed [552], particularly into the use of shared decision making where young people are the active decision makers (i.e., rather than parents making decisions for their children).

However, the evidence that is available (from adult studies) indicates that shared decision making in mental health may improve:

- how involved people feel in treatment decisions
 [553, 554]
- decisional conflict [555]
- clinicians' awareness of the preferences of the people in their care [556]
- satisfaction with treatment decisions, among both individuals and treating clinicians [557-559]
- individuals' understanding of their own values
 [555]
- attitudes towards recovery [560]
- knowledge about conditions and treatment [553, 557]
- levels of concern about medications [553, 558]
- adherence to medication in the short term [558]
- severity of substance use and psychiatric problems in people with substance use disorder [561]
- paranoid ideation in people with psychosis [560]
- uptake of psychoeducation and social interventions [553].

Recommendations

3.3.4.1 The case manager or treating clinician coordinates each individual's treatment and care throughout their episode of care. GPP

3.3.4.2 The case manager should be present at medical appointments to ensure continuity of care. GPP

3.3.4.3 A case formulation, including provisional diagnosis and management plan, should be

completed by case managers and/or treating team within 6 weeks of discharge from acute treatment. GPP

3.3.4.4 Case managers should facilitate a person's access to the necessary accommodation, vocational, recreational, welfare and primary health services. GPP

3.3.4.5 Case managers should regularly consult with individuals' GPs, at least every 6 months. GPP

3.3.4.6 Case managers should utilise shared decision making, a strengths-based and recovery approach to case management. GPP

Guideline 3.3.5. Functional Recovery Background

The social functioning of people with psychotic illness is poorer than the general population. Most social, academic, and occupational role functioning loss associated with psychotic illness occurs during the prodromal phase of illness and during the first few years following the first episode, after which it tends to reach a plateau [562, 563]. Premorbid social functioning, rather than improvement in symptoms, predicts later social functioning [564]. Pointing specifically to vocational functioning, Killackey et al. [565] note that:

The majority of people who develop psychosis do so at a time in their lives when they are just beginning to develop vocational interests and directions. Not surprisingly, the experience of psychosis derails this aspect of their development and either leads, or contributes significantly to, a rapid decrease in their likelihood of employment." (p. 333)

A lack of employment leads to other losses such as income, social contact, and external structure [566, 567], and less directly to losses of quality of life, community participation, and a sense of productivity [568]. Functional recovery can be understood as a reintegration and return to previous roles, habits and meaningful activities. It also includes the development of new skills, roles and interests that are in keeping with a young person's developmental trajectory and that support their goals for the future. Functional

recovery does not focus on symptoms. It focuses on what the person is doing, how satisfied they feel with their life and to what degree they are functioning in a meaningful way [150]. Functional recovery also incorporates the journey of personal recovery, during which a young person is able to make sense of their experience and move forward in their life. For young people, this means developing roles, returning to activities that are developmentally appropriate, and developing interests in new or previously valued activities [569].

Box 26. Core principles of functional recovery in early psychosis

Principle 1: Functional recovery is an equal primary goal of someone's treatment as symptomatic recovery

Principle 2: Functional recovery interventions are guided by understanding the hopes, aspirations and goals of the young person.

Principle 3: The individual needs to be empowered to drive their own recovery.

Principle 4: Functional recovery interventions should commence as early as possible.

Principle 5: Functional recovery interventions should aim at restoring or maintaining normal developmental trajectory.

Principle 6: Functional recovery interventions should take into account the young person's phase of illness and clinical recovery.

Principle 7: The multidisciplinary team should work collaboratively with the young person young and their family to plan and deliver functional interventions

Box 27. **Defining features of Individual Placement Support (IPS) [570, 571]**

Focused on competitive employment or education rather than sheltered or transitional employment

Service open to any person with mental illness who chooses to look for work or education, so that acceptance into the programme is not determined by measures of work readiness or illness variables

Job searching commences directly on entry into the program

The IPS program is integrated with the mental health treatment team, rather than constituting a separate vocational rehabilitation service

Potential jobs are chosen based on consumer preference

The support provided in the program continues after employment is gained, rather than termination at a set point, as needed by the individual

The IPS services are provided in the community, rather than at the mental health or rehabilitation facility

Specialist vocational and educational services, provided early in the course of illness or in the putative prodrome, may serve to halt or reverse deterioration in functioning. Individual placement and support (IPS) is a vocational recovery intervention described in Box 27 that has demonstrated positive outcomes in FEP [548, 572-574]. Recent data suggest that people with FEP with access to specialist vocational interventions following the IPS model have odds of achieving vocational recovery 3.53 times that of those not receiving the intervention [572].

There is no current empirical evidence exploring appropriate vocational functioning or vocational interventions for the pre-onset phase, but similar principles are likely to be relevant, particularly given functioning deteriorates during the pre-onset period. For this reason, provision of IPS in the pre-onset period should be regarded as good clinical care.

Further principles and processes to achieve them are outlined in the international consensus statement on supporting young people with psychosis in education, training, and employment [575].

Research shows that the main goal for people with severe mental illness is employment [576]. More recently, studies have shown that employment is among the highest priorities for young people recovering from FEP, and their families [577, 578]. People employed or enrolled in training or education are more likely to have social connections, stable accommodation and be socially and economically engaged [579]. Early functional recovery, including work and education, is a more important predictor of long-term health and functioning than early symptomatic recovery [429].

Neurocognitive interventions

Disturbances in cognitive functioning, such as poor concentration and memory, reduced speed of information processing, or difficulties organising one's thinking, are commonly experienced during an acute phase of psychosis. Extensive research indicates that widespread stable impairments are also frequently present in early psychosis [580]. These impairments are usually evident during the UHR phase. In this case by the time FEP is diagnosed the impairments are of similar severity to those seen in individuals with chronic schizophrenia.

Cognitive impairments are strongly associated with poorer functional outcomes and disability (independent of symptomatic state [581]). There is also evidence that they may limit the benefit young people might gain from psychosocial interventions like IPS, outlined earlier [582].

Cognitive remediation

Cognitive remediation therapy (CRT) is a behavioural training-based intervention. It aims to directly improve or restore neurocognitive processes (e.g., information processing speed, attention, memory, executive function) [583]. CRT usually involves computerised drill and practice exercises undertaken at high frequency and intensity (e.g., for 40 minutes, 2-4 times per week). CRT may also involve coaching in strategies for improving neurocognitive functions. Wykes et al. [584] found in a single-blind RCT in a group of young people with 'recent onset schizophrenia' that CRT delivered over 3 months, with at least three sessions per week, was associated with improved cognitive flexibility to a greater extent than treatment as usual; improved cognitive flexibility was associated with better clinical and functional outcome.

Three other RCTs have also shown favourable effects for CRT, conferring benefit to learning and memory [585], functional outcome 1 year post-treatment [586], executive functioning and neurobiological protection [587] in key regions implicated in social and non-social cognitive impairment in first episode cohorts. Whilst some methodological limitations undermine these results (raters not blinded to participants treatment condition), a recent review [588] and meta-analysis and systematic review (2015; n = 615) reports that CRT significantly reduces symptoms and improves verbal learning and memory and functioning [589]. The authors conclude more research is required to consolidate these preliminary results supporting the efficacy of CRT treatment for individuals recovering from a first episode of psychosis.

Cognitive adaptation

Applying compensatory strategies and environmental supports can help an individual 'work around' their cognitive difficulties. An example of this is teaching an individual to use a calendar to aid memory, planning and organisation. The main focus of compensatory interventions is improving daily functioning. A prime example of this approach is cognitive adaptation training (CAT) [590, 591]. Compensatory approaches directly improve functional outcomes: activities of daily living, vocational functioning and behaviours important for functioning, such as remembering to take medication and motivation [592, 593].

Recommendations

- 3.3.5.1 Treatment of early psychosis should give equal weight to both symptomatic and functional recovery. Clinicians should focus on remission of symptoms and also prioritise functional recovery assessment of a young person's functional capacities, performance and needs. GPP
- 3.3.5.2 Clinicians should promote functional recovery by directly implementing interventions and coordinating care in services ^{GPP},
- 3.3.5.3 Clinicians should facilitate access to educational and vocational services to the FEP and pre-onset groups GPP
- 3.3.5.4 Employment and educational consultants should be integrated within FEP services as much as possible. GPP
- 3.3.5.5 Employment services for people with FEP should be consistent with an individual placement and support model.^A
- 3.3.5.6 Vocational goals should be formulated in collaboration with the individual being treated, be developmentally appropriate and may include education and training. GPP
- 3.3.5.7 Cognitive remediation programs and/or cognitive adaptation strategies should be offered to young people who have cognitive deficits that interfere with functional recovery. GPP

Guideline 3.3.6. Trauma

Background

There is considerable evidence of a link between prior exposure to trauma and psychosis. A substantial body of research suggests that exposure to potentially traumatic events (PTEs), particularly in childhood, may increase the risk of subsequent psychosis [594-596]. There is also evidence of a cumulative, 'dose-response' relationship: the more exposures, the greater the risk of subsequent psychosis [596]. Of particular importance in FEP, a history of sexual trauma significantly increases the risk of conversion to psychosis in young people considered UHR of psychosis [597].

Previous experience of trauma in both childhood and adulthood is a strong predictor of later post-traumatic stress disorder (PTSD) in the general population [598]. Consistent with this, not only

does a history of trauma increase the risk of developing a psychosis, but it also increases the risk that a first episode of psychosis will result in PTSD. Bendall et al. [599] found that people with a history of childhood trauma had 27 times the risk of developing PTSD in response to a first episode of psychosis. Rates of PTSD in early psychosis are high: around 39% of people with FEP also have PTSD triggered by their psychotic experiences [600-603]. Given the high levels of distress and functional impairment associated with PTSD, this result highlights the importance of identifying and effectively managing the condition in people with FEP.

There is good evidence that a history of trauma may influence the clinical presentation in FEP, with certain types of childhood adversity more likely to be associated with particular psychotic symptoms. Large epidemiological studies from the UK [604] and the US [605] suggest that childhood sexual abuse tends to be associated with increased risk of hallucinations. Childhood physical abuse and neglect, on the other hand, are more likely to be associated with paranoid delusions. Clinical experience suggests that the actual content of these hallucinations and delusions (e.g., whose voice is heard or which people feature in the delusion) often relates directly or indirectly to the earlier trauma [606].

The impact of comorbid PTSD on the clinical presentations is predictable, with consistent relationships found between the presence of PTSD and the severity of depression and anxiety in FEP [600]. There is also evidence that a comorbid diagnosis of PTSD may increase the risk of suicide in FEP [603]. The presence of comorbid PTSD also affects clinical presentation in FEP, increasing complexity and potentially influencing the content of hallucinations and delusions. Since it plays such an important role, it is reasonable to assume that actively addressing trauma history is important in a comprehensive treatment approach to FEP and is part of good clinical care.

Systematic literature reviews and clinical practice guidelines consistently nominate trauma-focused psychological treatment as the first line intervention for PTSD. This term covers various trauma-focused CBT (TFCBT) approaches including prolonged exposure (PE) and cognitive processing therapy (CPT), as well as Eye Movement Desensitisation and Reprocessing (EMDR). Further details can be found in the

Australian Guidelines for the Treatment of Acute Stress Disorder and Posttraumatic Stress Disorder [607] and the UK's NICE PTSD guidelines [608].

Preliminary research suggests that these traumafocused interventions are also useful for the treatment of PTSD in people with psychosis. A 2012 Dutch study [609] reported an open trial of 27 people with diagnoses of both psychosis and PTSD who were provided with 6 sessions of EMDR therapy. Over 75% of participants who completed the study no longer met criteria for PTSD after treatment. PTSD symptoms, auditory verbal hallucinations, delusions, anxiety, depression, and self-esteem all improved significantly. A later study, also from the Netherlands [610], randomly assigned 10 people with diagnoses of both PTSD and psychosis to PE or EMDR. The two interventions were equally effective, with 70% of participants no longer meeting criteria for PTSD at follow-up. Importantly, no adverse events occurred in either study and no participants showed any worsening of psychotic symptoms, general psychopathology or social functioning. This latter finding is supported by a more recent larger study [611] of 155 people with both PTSD and psychosis who were randomly allocated to either trauma-focused treatment (PE or EMDR; n=108) or a waitlist control (n=47). Adverse events and symptom exacerbation were rare but, when they did occur, this was predominantly in the waitlist condition.

Recommendations

3.3.6.1 Early psychosis clinicians should develop a rapport with young people with early psychosis and then sensitively assess their current trauma and trauma history. This includes the experience of having a psychotic episode. This assessment should be incorporated into psychological treatment plans. GPP

3.3.6.2 Early psychosis services should have policies in place to deal with reports or situations of ongoing trauma. GPP

3.3.6.3 Clinicians should seek training, support and supervision as required for this work. GPP

3.3.6.4 Clinicians should be mindful of the increased likelihood of depression and anxiety that accompanies exposure to trauma, and treat these accordingly. GPP

3.3.6.5 Trauma-focused psychological interventions may be effective in reducing PTSD and psychotic symptoms in young people with psychosis. ^{GPP}

Guideline 3.3.7. Integrated specialised treatment in FEP

Background

As noted, integrated interventions refer to the collaborative provision of biological and psychological interventions, along with assertive case management and other psychosocial interventions (such as vocational or group interventions). The Recovery After an Initial Schizophrenia Episode (RAISE) study is a largescale evaluation of 34 specialised integrated intervention FEP clinics in the USA. The clinics combine pharmacological and psychosocial treatments and are delivered by multidisciplinary teams. The primary goal is to 'promote symptomatic recovery, minimise disability, maximise social academic and vocational functioning and be capable of delivering in a real world setting' (p.240) [612]. The collaborative and coordinated treatment implemented at the clinics is titled 'Navigate'. Broadly, it includes four core components: 1) personalised medication management; 2) family psychoeducation; 3) resilience-focused individual therapy; and 4) supported employment and education. These components are conducted within a shared decision-making, patient-preference framework [613] with small staff-to-client ratios. Initial results are positive, with a recent study (2016) reporting 223 participants receiving 'Navigate' remained in treatment for longer, had greater improvement in quality of life and psychopathology, and greater involvement in work and school (relative to community care) [614]. Importantly, the efficacy of the Navigate program was greatest when implemented soon after initial psychosis onset, suggesting a critical period for effective intervention in FEP.

Another larger study compared an integrated multi-element psychosocial intervention (CBT, family intervention and case management) for FEP patients and their families, with treatment as usual [615]. The study comprised an epidemiologically derived cohort (n=392) and the experimental treatment was delivered in routine mental health services that adopted early intervention treatment principles. Patients receiving the integrated treatment showed greater reductions in overall symptom severity, global functioning, emotional wellbeing and subjective burden of delusions. Findings from this study suggest FEP integrated services are effective and can be embedded within existing mental health services.

Six European centres have conducted RCTs to evaluate the effectiveness of specialist FEP services. In addition to the pre-onset study, the OPUS trial in Denmark randomly assigned 547 FEP participants to either an integrated treatment in which they were provided with 2 years of enhanced service, or to standard treatment [616]. The integrated treatment was more intense and assertive (caseload 1:10) and covered additional domains such as family therapy and social skills training. The more assertive nature of the early intervention model is seen in the fact that people in the integrated treatment had an average of 77 contacts over the 2-year study, compared with 27 in the standard treatment group, which additionally had a higher caseload (1:25). The results indicate that the integrated treatment had beneficial effects on symptomatic and functional outcome at 1- and 2-year follow-up [423, 616], as well as a perceived reduction in family burden [617]. At 5-year follow-up, those receiving the intervention package were less likely to be living in supported housing and had been hospitalised for

fewer days, but otherwise there was no difference between integrated and standard treatment [22]. This trajectory continued at 10-year follow-up, with most of the positive short-term effects of the OPUS intervention no longer significant [618]. This suggests that early intervention may need to be sustained to be effective long-term.

The Lambeth Early Onset (LEO) trial in England [16], randomised FEP participants (or people experiencing a second episode of psychosis where there had been failure to engage previously) to receive either treatment from standard services, or from an early intervention service. The results demonstrated a beneficial effect of early intervention on hospital re-admissions, relapses and drop-outs. The early intervention group were also more adherent to medication, spent more time engaged in educational or vocational pursuits, and established or re-established relationships better than those receiving standard treatment [619]. In other words, the LEO trial showed that early psychosis intervention systems can produce gains in clinical, functional and social recovery, although there are some difficulties in drawing firm conclusions given the relatively modest sample size. More substantial improvement in vocational recovery however remains a critical frontier in early psychosis intervention.

In Norway, Grawe et al. [620] reported on an integrated treatment that included pharmacotherapy, case management, structured family psychoeducation, family communication and problem-solving skills within a CBT framework, home-based intensive crisis management, and individual CBT for residual symptoms and disability. This integrated care demonstrated a greater impact than standard treatment on negative symptoms, 'minor' psychotic episodes, and positive symptoms, but not on hospital admissions or 'major' psychotic episodes.

In Sweden, the Parachute Project [621] compared an integrated treatment approach (including structured crisis intervention, lowest optimal doses of neuroleptics, recurrent family meetings, cognitive therapy, and access to low-stimulus overnight care) with a historical and a prospective control group. The intervention group used fewer inpatient bed days than both control groups and received lower neuroleptic doses than the historical control group, and functioning was higher at 12-month follow-up in the intervention group compared with the historical control group.

In a study based in Bedfordshire, Agius et al. [622] reported that an integrated treatment approach (including an assertive follow-up model, structured psychoeducation, relapse prevention and other psychosocial interventions, and use of SGAs at the lowest dose possible) was associated with, among other things, higher functioning, lower levels of depression and lower rates of involuntary treatment, relapse and rehospitalisation than those receiving standard care. Data were, however, based only on clinical notes, mitigating the empirical validity of the study.

In contrast to these findings, Kuipers et al. [623] evaluated a South London early intervention service which offered an integrated treatment including SGAs, psychological interventions (individual CBT and, if appropriate, family intervention), and vocational and other assistance as needed. They reported that the integrated treatment had no demonstrably greater effect on participant outcome than standard treatment.

As it stands, therefore, integrated treatment approaches appear to be more effective than standard care in the short-term treatment of early psychosis, although their efficacy in the medium term is less settled.

There are at least two ways of implementing integrated early intervention services: as a specialist, stand-alone model, or as a partial model, in which early intervention specialists are situated within existing service structures. The relative advantages and disadvantages of each model have not been explored in any significant detail. Recent British data using historical control as comparison suggests an advantage of the stand-alone model over a partial model with respect to days admitted to hospital and functional recovery over both 1- and 2-year followup, with the partial model demonstrating some superiority with respect to functional gains to a generic approach in which there was no specialist early intervention involvement [624].

Recommendation

3.3.7.1 Integrated specialist services are more effective than standard services in the treatment of people with FEP.^A

Guideline 3.3.8. Use least restrictive treatment possible

Background

Choice of treatment setting is an important element in the management of people with psychiatric illness. This is particularly salient in the instance of early psychosis, given that restrictive treatment mechanisms may imperil engagement with services for some time to come, with the likely outcome being a poorer prognosis. Further, involuntary treatment and hospitalisation may be appraised as a particularly powerful stressor, and serve as a catalyst for the development of posttraumatic stress symptoms [178, 625], although psychotic symptoms themselves are likely to be more traumatic than the treatment for these [626, 627]. Minimising the trauma of both symptoms and the way in which these are treated should be an important consideration. Additionally, treatment in an unfamiliar environment may

hinder recovery by inhibiting the degree to which skills learned during treatment are generalisable to the individual's normal environment.

For all of these reasons, treatment at home is optimal. The choice of setting should be based on the severity of presentation, the assessed level of risk, and the extent and quality of social and family support. Home treatment is likely to be most appropriate for those with social support and, in the case of FEP, a shorter DUP [628]. Specialist teams, rather than generic crisis teams, may be in the best position to prevent admission [629].

When hospital admission is necessary, clinical experience suggests it is not appropriate to admit younger adolescents to adult facilities that are dominated by people with long-term mental illness. When hospital admission is necessary, but the facility is not considered appropriate, an adolescent or youth specialist should be involved in the person's care.

Recommendations

- 3.3.8.1 People with early psychosis should receive treatment in the least restrictive manner possible. Whenever possible, the location of the initial assessment should be community-based and at a place that is convenient to the person and their family. GPP
- 3.3.8.2 A range of treatment settings should be available to people, including home-based support, supported accommodation, rooming in, outpatient services, and inpatient care. GPP
- 3.3.8.3 The levels of risk (to self and others), the available resources (including community support) and the needs of the individual and their family should be assessed to determine whether the individual can be managed at home. GPP

- 3.3.8.4 Where hospitalisation is required, people should be admitted to a facility that can cater for, and is appropriate to, their age and stage of illness. Where streaming is not possible, a special section may be created in a general acute unit for young people with recent-onset psychosis. GPP
- 3.3.8.5 Community treatment orders should be used for the minimum duration required to meet specified treatment goals. GPP
- 3.3.8.6 Involvement of police to enforce treatment should be kept to a minimum and used as a last resort in the case of immediate risk. GPP
- 3.3.8.7 The use of seclusion (if used at all) should be kept to the minimum frequency and duration to meet the treatment aims when managing people who are high-risk. GPP

Guideline 3.3.9. Family involvement

Background

For the purposes of these guidelines, 'family' is used in a broad sense to include parents, siblings, partners, carers, extended family members and close friends. This section refers specifically to family involvement in an individual's treatment and the provision of supportive and other interventions to families; families' contribution to service development is outlined in Guideline 3.3.18, 'Family participation and family peer support'.

Box 28. Specific issues for families in early psychosis

The heightened emotional impact of a young person experiencing mental health difficulties for the first time, possibly maximised if the family's pathway to receiving appropriate psychiatric assistance was not straightforward, requires sensitive responses from services and clinicians.

There are special needs for information and education as families:

- Deal with possibly severe psychiatric illness for the first time
- Cope with diagnostic ambiguity and variable outcome
- Are faced with unfamiliar and often bewildering symptoms

Psychosis (both emergent and established) can have an enormous impact on the family system, as it can lead to bewilderment, fear, grief and suffering for both the person with the illness and their families [630-632]. This may particularly be the case with early psychosis, as most young people are living with their families at the time of onset of psychosis [630, 633]. Family members can experience stigma, embarrassment, isolation, loss of mastery and control, decreased self-worth, and disruption to educational and/or vocational trajectories [634]. Very few studies have evaluated the emotional impact of early psychosis on families, but some studies suggest onset of psychosis is a particularly distressing time for them [635, 636]. Specific issues for families in early psychosis are outlined in Box 28.

Families may play a vital role in supporting people with early psychosis and facilitating engagement

in treatment, thereby minimising lengths of hospitalisation [637] and possibly preventing first psychotic relapse [425]. The combined aims of alleviating distress in families and maximising the individual's prognosis suggests the importance of the provision of support to families (refer to Box 29 for general principles in working with families)

Family work should be developed within a collaborative framework, in which the clinician works in partnership with the family. The family should be promoted as active members of the treatment team. The aims of family interventions are to minimise the disruption to the life of the family and the risk of acute stress, high levels of burden and long-term grief, and to maximise the adaptive functioning of the family. Family work should be flexible and tailored to the needs of each individual family. It should empower the family to cope and adjust to the crisis of the psychotic illness. The underlying assumption should be that the family is no different to any other in their response to crisis and their ability to solve problems. Interventions are therefore aimed at promoting coping skills, support and education rather than addressing 'dysfunction'. Given the equivocal evidence to date linking expressed emotion (EE; an interactional style characterised by criticism, hostility, and/or emotional over involvement) and outcome in early psychosis, and the absence of any demonstrated link between EE and outcome in the UHR group [638, 639], it is not clear that family interventions in this group should include an EE component.

A range of interventions have been employed with families in the FEP empirical literature, including therapies with an emphasis on psychoeducation alone (offered individually or in multifamily groups), to broader interventions including a focus on early warning signs, stress management, problem solving skills, affect regulation, attributing maladaptive behaviour to illness, communication skills training, and reduction of high EE (see McNab & Linszen [638], for further details on empirically-explored family interventions in FEP). It is therefore difficult to identify which components of family interventions are key. Further, these interventions sometimes have little impact on client outcome [640] or paradoxically appear to be associated with worse client outcome [641]. Additional methodological problems with this evidence preclude any firm conclusions being made about the efficacy of these interventions. There is no evidence to date

exploring the efficacy of family interventions in the UHR phase. The evidence base for family intervention in the pre-onset and FEP stages is therefore not established; however, there are compelling reasons for this to be regarded as good clinical care, including the need to support those who are supporting people with early psychosis, and the likelihood that, consistent with the stress-vulnerability model more broadly, at least some part of the family environment (although perhaps not yet examined empirically) will influence a young person's progress.

On a more general level, the initial stages of family intervention may need to deal with feelings of guilt, anger, sadness and loss, and the first contact with the family often functions as a debriefing session. It also provides an opportunity to explain mental health services and the benefits of the family's support. Targets of intervention include the impact on the family system, the impact on the family members, and the interaction between the family and the course of the psychosis. Emotional and practical support can assist this process. Responses to pre-existing problems within the family should be guided by general crisis intervention principles.

Supporting families requires having regular contact with them. Needs for contact are likely to vary across phase of illness. Suggestions about frequency of contact according to phase of illness are outlined in each specific phase.

Box 29. General principles for working with families with an early psychosis member

Recognise the phase nature of the individual's illness, and that family work needs to be adaptable and flexible in approach.

Recognise that families will have a range of different feelings, worries and questions.

Recognise that families need time and an opportunity to deal with the crisis and ensuing stressors.

Recognise that the explanations that families have for what has happened to them need to be heard and understood.

Recognise that families need a framework for understanding.

Recognise that families also need a recovery time and may go through particular stages.

Recognise that the family work may change over time, ranging from a maintenance role to dealing with longer-term, ongoing issues.

Recognise that family work is a preventive intervention. It is aimed at addressing levels of distress, burden, coping, social functioning and general health for all family members.

Adapted from Gleeson, J., et al., Family intervention in early psychosis, in The recognition and management of early psychosis: a preventive approach, P.D. McGorry and H.J Jackson, Editors. 1999, Cambridge University Press: Cambridge. P. 376-406[642]

In implementing the following recommendations, it is important to respect individuals' right to confidentiality while providing support and information to family members. This can be a particularly fraught area with young people: their rights to confidentiality may not be well understood by family, and the limits of this right may not be well understood by young people and clinicians. Guidelines written by Rethink (http:// www.rethink.org/resources/) and ReachOut (au.reachout.com/confidentiality) regarding confidentiality may be useful to provide to young people, carers and clinicians. Although empirical evidence is lacking, anecdotally it is in these instances that family peer support workers family members of people who have been through a clinical service before - may be particularly helpful. These workers can provide assistance and reassurance to families, having experienced the process of caring for someone with emerging psychotic illness. This approach may be more

acceptable to young people than clinicians' having contact with family, given concerns about possible confidentiality breach. Such workers are not part of the clinical team, so do not have access to confidential information. For further details about how such a scheme might operate, see Leggatt [632]; for example, EPPIC guidelines propose that all families should have access to a family peer support worker, perhaps even despite a young person's objection, except in exceptional circumstances (such as the unawareness of the family of the young person's involvement with services, or longstanding familial abuse).

Recommendations

- 3.3.9.1 The needs of individual family members should be recognised and addressed (where appropriate, within clinical services, or alternatively, by referral to external agencies) at all stages of a person's recovery. GPP
- 3.3.9.2 The case manager should have frequent contact relevant to the phase of illness and the needs of the individual and their family. GPP
- 3.3.9.3 Family attendance and involvement should be reviewed as part of the clinical review process. GPP
- 3.3.9.4 The treating clinician should assist the family by providing information about psychotic disorders (including the recovery process) and by helping the family, where necessary, develop skills in problem solving and enhanced coping strategies. GPP
- 3.3.9.5 The treating clinician should maximise the responsiveness of the family to early warning signs in order to facilitate relapse prevention. GPP
- 3.3.9.6 Where necessary, the clinician should prepare the family to deal with crises. GPP
- 3.3.9.7 Family peer support workers may be a useful resource for information and emotional support, particularly in situations when an individual being treated does not support the involvement of the family. GPP
- 3.3.9.8 Families with more complex needs, such as those with a history of sexual and/or other abuse or long-standing emotional conflict, may need to be referred to specialist agencies. GPP
- 3.3.9.9 Early psychosis services should endeavour to establish a family peer support component within their service.^C

Guideline 3.3.10. Goals as guides to treatment

Background

Treatment goals are key reference points for assessing an individual's progress and treatment effectiveness [643], and have been found to have positive effects on both client motivation and outcome [644, 645]. More recent policy initiatives have placed a greater emphasis on collaborative goal-setting, increasing the active participation of people in the planning and implementation of their own treatment. In contrast to the model of the clinician as 'expert' and the person being treated as a 'passive recipient', collaborative treatment planning aims to empower people in their own recovery [646].

The most frequent operationalisation of collaborative treatment planning is the Individual Service Plan, an agreement between an individual and their case manager (as a representative of the service) about diagnosis, goals for treatment and how these might be achieved. It may detail:

- the major problems
- · treatment goals
- strategies to achieve goals
- people involved and their responsibilities
- time frames for achieving or reviewing goals.

Individual service plans should be documented early in the course of treatment and regularly reviewed to ensure progress is being made towards treatment goals and that all parties, including clinicians and the individual, are satisfying key requirements and responsibilities.

The Office of the Chief Psychiatrist (Vic) has published helpful guidelines as to what a treatment plan should include: (http://www.health.vic.gov.au/chiefpsychiatrist/treatmentplan/forum-feedback.pdf).

Recommendations

- 3.3.10.1 Both the case manager and treating doctor should meet with the individual being treated and, where possible, their family, and develop an individual service plan within 4–6 weeks after entry to a service. GPP
- 3.3.10.2 The case manager should regularly review the individual service plan with the individual. GPP

Guideline 3.3.11. Group programs

Background

Psychosis disrupts social networks, which in turn can worsen the outcomes of illness [135, 154]. Group work can meet a number of needs in early psychosis, including reducing social isolation and experiences of stigma and providing specific content that may assist in recovering from psychotic experiences. Group programs provide an opportunity to reduce isolation, build self-esteem, and provide peer support [647]. Interacting with people who share similar experiences and understand the impact of psychosis is highly valued by group participants.

Group work may provide a medium for therapeutic change beyond this 'normalising' element, using a diverse range of theoretical frameworks and approaches including experiential learning, CBT, psychotherapy, psychoeducation, systems theory and occupational science. Areas of focus include coping and stress management skills, psychoeducation, therapeutic groups for specific comorbid disorders such as anxiety and depression, vocational and educational planning and training, social and recreational skills, health promotion, lifestyle issues such as drug use and safe sex practices, and creative expression and personal development. A non-directive, supportive, and encouraging attitude on the part of staff is likely to optimise treatment gains in the group setting [648].

Malla et al. [128] suggest that a relatively short course of group treatment is more likely to retain interest and engagement in younger people. The group context may also differ in the early onset population from those with more established illness because people with early psychosis may be more naïve regarding the mental health system, more willing to exercise control over treatment and their future, and may have a higher potential for substance use problems and impulsivity. Group interventions for early psychosis should take these factors into account, for example by incorporating specific substance use interventions, or providing ample opportunity for participants to guide group program development and evaluation.

There has been limited empirical examination of the effectiveness of group interventions in people with FEP. Data suggests that those referred to group programs may have poorer functioning prior to referral, which involvement in groups may effectively remediate [649]. A group stress

management program designed for people with FEP has recently been found to reduce hospitalisation rates over and above standard FEP services [650]. One very small open trial (n=5) found that participants were very satisfied with CBT delivered in group format and reported a reduction in psychotic symptoms after the group intervention [651]. Qualitative data also suggests that young people appreciate groups as valuable sources of information, therapy, and support [652]. There is no evidence to date exploring the efficacy of group programs for people considered to be UHR; intuitively, however, the above principles would seem to apply to that group as much as FEP, with the exception of the 'recovery' paradigm. Sound clinical practice also requires effective liaison between the treating team and the group program, to ensure clinicians are working together in meeting participants' needs.

Recommendations

- 3.3.11.1 Group programs should be offered to those with $\mathsf{FEP^B}$ and at $\mathsf{UHR}.\mathsf{GPP}$
- 3.3.11.2 Group programs should be available in a range of clinical and community settings. GPP
- 3.3.11.3 Group programs should be tailored to the different needs of people at different phases of illness, GPP
- 3.3.11.4 Decisions about participation in any group program should be made collaboratively with the individual, based on an understanding of the potential benefits for that person. GPP
- 3.3.11.5 Goals should be set collaboratively and progress of participants towards these goals should be regularly reviewed. GPP
- 3.3.11.6 The development of group programs should be based on a thorough planning process which includes needs assessment, the setting of objectives, development of content areas and establishment of evaluation strategies. GPP
- 3.3.11.7 Where appropriate, group program staff should assist people to find meaningful psychosocial activities (such as other groups/activities) external to clinical services. GPP
- 3.3.11.8 There should be an effective clinical interface between the group program and the case manager (or treating clinician) or multidisciplinary team. GPP

Guideline 3.3.12. Psychoeducation

Background

Psychoeducation aims to develop a shared and increased understanding of the illness for both people with psychosis and their families [653]. In the broader medical literature, it is clear that access to quality information facilitates individual and family decision-making and encourages people and their families to take a more active role in managing their own health [654, 655]. Data in established schizophrenia suggest that psychoeducation significantly reduces relapse and re-admission rates and length of stay when re-hospitalised [656]. It is also possible that psychoeducation improves compliance with medication and has a positive effect on wellbeing [656]. One study has examined the role of a 'psychoeducational treatment program' in adolescents with psychosis, but it is difficult to draw conclusions from this study regarding psychoeducation specifically, as the 'psychoeducational program' included educational seminars for parents, problem-solving sessions, and engagement with social networks (including schools and vocational support [657]. To date only one study has investigated the impact of seven sessions of specific psychoeducational strategies for people who are UHR and reported significant reduction in psychopathology and as well as an improvement in knowledge, global functioning and quality of life [658]. However, the uncontrolled nature of this study, and its small sample size (n=16), significantly limit its generalisability. Further research is required before psychoeducation alone can be said to have an empirical evidence base as an intervention in the UHR or FEP groups. Despite this, however, and particularly given its impact in established psychotic illness, provision of psychoeducation is good clinical care.

Box 30. Psychoeducation can include explanation of:

- The nature of illness/es (in the case of comorbidity) (including the stressvulnerability model)
- The range of treatment options available
- The patterns and variable nature of recovery
- The prospects for the future and how these can be influenced
- Agencies and personnel involved in treatment

Qualitative research suggests a distinction between information for the purpose of settling and reassurance, and information provided to educate the young person or family. These data also reinforce the need to make psychoeducation an ongoing and individualised approach; young people who had experienced FEP noted that they felt insignificant and not worthy of information if needs for information were not recognised and met during treatment, and were more likely to disengage from treatment [659]. Needs for information are, however, likely to differ from person to person, as are the most appropriate media through which to deliver information. Peer-to-peer psychoeducational approaches, for example, have been shown to be effective in adults with psychosis, and may be particularly palatable to adolescents [660].

Family psychoeducation may also reduce relapse rates [661-663]. However, as noted previously, it is unclear whether psychoeducation alone in the FEP or UHR groups shows positive effects, given that most family interventions used in the FEP literature include psychoeducation as one amongst many interventions.

Psychoeducation can be delivered in a variety of modes, including one-to-one interactions, group sessions, peer support sessions, and family work. This information should be specific to early psychosis. Psychoeducation in the first episode field needs to be particularly aware of healthy resistance to the psychological threat of self-stigmatisation with associated poorer insight and reluctance to engage in the psychoeducation process [664]. Psychoeducation is also not a standalone intervention, but should be seen in the broader context of the overall therapeutic task with several overall objectives, including enhancing the individual's sense of meaning, mastery, and self-esteem. Timing of psychoeducation is also important - during acute exacerbation of mental state abnormalities, basic practical information is essential, but more detailed and comprehensive psychoeducation should be deferred until this has settled [664]. Group programs may be a particularly effective way to provide psychoeducation, using facilitating techniques such as paired discussions, 'brainstorming' and role-playing. Regardless of the format, frequent checks that individuals and their families understand psychoeducational material may be appropriate, as the emotional impact of psychosis can make it difficult to

absorb new information. Information should be provided at an appropriate pace, taking into account individual and family factors and the stage of illness, remembering that the emotional impact of psychosis can make it difficult to absorb information in the very early stages. It should also take into account how the person usually learns or absorbs new information.

There are likely to be some similarities between psychoeducation for FEP and for those at UHR, particularly the stress-vulnerability model and the experience of psychotic symptoms. There are key differences, however, given the UHR group is yet to experience psychosis onset. Psychoeducation in this group may also include an awareness of the possibly stigmatising effect of an 'at-risk' diagnosis, a discussion of the risk of false positives in identifying those at UHR and in particular to address fatalism about psychosis onset (see Yung et al., 2004, for further details). In both the UHR and FEP phases, psychoeducation should not be limited to psychotic symptoms and should extend to any substance or psychiatric comorbidities that the individual is experiencing.

Recommendations

- 3.3.12.1 Psychoeducation should be provided for people with early psychosis and their families. GPP
- 3.3.12.2 The case manager and the treating doctor are responsible for ensuring access to psychoeducation. GPP
- 3.3.12.3 Psychoeducational material should be appropriate for young people and for early psychosis. GPP
- 3.3.12.4 Psychoeducation and support should be provided to the individual and their family on an initial, continuing and 'as needed' basis through individual work, group programs and a consumer support groups or a family participation program. GPP
- 3.3.12.5 People and families of a culturally or linguistically diverse background should have access to information in their own language, using interpreters where appropriate. GPP

Guideline 3.3.13. Suicide prevention

Background

Evidence suggests that suicide rates are lower in early intervention services than in previous cohorts of young people with FEP treated in generalist services [19, 237, 241]. However, the 'active ingredients' of the model in reducing risk are unclear, and once treatment has terminated this effect seems to diminish [241, 243, 665]. Whilst the efficacy of early intervention services remain the focus of significant debate, evidence suggests that extending this model of care beyond the initial 18-month to 2-year period could reduce suicide risk over time for this population.

A number of strategies can be employed to prevent suicide. Universal service-wide suicide prevention strategies involve training staff and carers in order to increase confidence and skills in detecting, assessing, and managing suicide risk. Selective strategies to reduce suicide risk include screening and monitoring via routine risk assessment and the development of risk management systems, and are generally appropriate across all individuals presenting with suicide risk factors. Indicated interventions, or specific treatments for those identified as at high risk at the screening stage, include acute suicide risk containment (including increasing frequency of contact and support or hospitalisation), pharmacological and physical treatments specifically for suicide risk, psychological interventions, psychosocial interventions, and self-help. However, the additional benefit of these interventions is generally small [666, 667], with data suggesting that the key risk factor to address in reducing suicide is appropriate pharmacological treatment of psychotic and other psychiatric disorders, and adherence to this treatment [246]. As with all therapies, these interventions must be tailored to the individual, taking into account the range of factors that could be contributing to suicide risk, including acute psychotic symptoms, comorbid mood disorder, other comorbidities such as personality disorder, psychological reactions to psychotic illness, external factors such as reactions of significant others and losses, and reactions to suicidality in others, including posttraumatic reactions and suicide pacts between clients [239].

Pharmacological and physical treatments include, for the FEP group, the use of SGAs rather than FGAs [668] and clozapine [669]. Empirical

evidence outside the FEP field suggests other interventions. For example, the affective psychosis literature suggests ECT can be helpful for suicidality [670], and those with more established illness have shown improvements in suicidality when treated with antidepressants (c.f., in the absence of this [671]), and possibly lithium[672].

Psychological interventions in early psychosis are rarely designed specifically to reduce suicide risk. The only specific intervention for suicidality in people with FEP, LifeSPAN, is a 10-session individual CBT program creating a formulation of short- and long-term factors contributing to suicidality and treating short-term factors. Evidence to date suggests LifeSPAN is associated with significant reductions in hopelessness and suicidal ideation, but not in suicide attempts [152]. CBT for psychosis (c.f. suicidality in FEP) alone does not appear to reduce risk of suicidal behaviour in people with FEP over and above supportive counselling or treatment as usual [673]. Psychosocial interventions such as provision of support, encouragement of daily activity, and supporting peer relationships and work and vocational involvements may reduce suicide risk [249, 674], although this has not been explored in the FEP field specifically. Self-help resources may also be useful, although again their impact in early psychosis has not been examined.

Adequate and appropriate pharmacological treatment of depression would also likely reduce suicide risk, given the relationship between depressive disorder and risk in the FEP group [22, 242]. Similarly, improving adherence to treatment would likely reduce risk [246], as would working with young people around deliberate self-harm, given its relationship to suicide.

Recommendations

3.3.13.1 Intensive treatment should be provided during high-risk phases of illness. GPP

3.3.13.2 Services should develop and implement appropriate, evidence-based interventions for deliberate self-harm. GPP The LifeSPAN program is likely to be of some benefit for suicidal individuals. B

3.3.13.3 SGAs⁸, especially clozapine^A may be useful for suicidality.

Guideline 3.3.14. Substance use (including cigarette use)

Background

Interventions provided to young people to treat substance use issues should recognise the features of this population including their young age, the circumstances that brought them into treatment, widespread substance use among peers, and cognitive difficulties arising from substance use [675]. Integrated treatment is likely to have best effect, and can be provided either within a single service or in collaboration with a drug treatment service [676].

Provision of feedback about assessment may be therapeutic in its own right, providing an opportunity to give psychoeducation about risks to mental and physical health associated with substance use, especially links between regular substance use and poor clinical outcomes [677, 678]. Harm minimisation strategies may also be helpful to reduce harmful effects associated with substance use and build motivation to change.

Psychological treatments can be successful in reducing substance use, in particular cannabis use. For example, motivational interviewing aims to move the person from the pre-contemplative stage to the contemplation or action stage in changing their substance use, usually by increasing their awareness that substance use may thwart their pursuit of personal goals [676]. CBT can also be used to challenge the beliefs that individuals hold about their ability to change and their need to use substances. It focuses on developing skills such as refusal rehearsal, stress management and problem solving to assist in changing behaviour and preventing relapse. Particular strategies are outlined in Box 31.

CBT has been effective in the general population in improving abstinence and reducing drug-related problems [679]. There have been no empirically-evaluated interventions targeting substance use in the pre-onset phase. The Cannabis And Psychosis (CAP) therapy project is the only trial of a psychological intervention specifically designed to address cannabis use in those with early psychosis (specifically FEP [680]). Implemented during the early recovery phase (10 weeks post-clinical stabilisation), this intervention is delivered over 3 months, ideally with 10 weekly sessions and a 'booster' session via telephone 3 months post-completion. Using a motivational

interviewing paradigm, CAP starts with engagement and detailed assessment, followed by education about links between cannabis and psychotic symptoms and addressing motivation to change. Subsequent therapy sessions are guided by the individual's motivation to change, and may include additional education about cannabis and psychosis, motivational interviewing strategies, goal setting and achievement strategies, and relapse prevention (see Hinton et al 2007[678], for further details). No differences were detected between CAP and psychoeducation in a sample of 47 young people with FEP, with both groups reporting significantly lower level of cannabis use at 6-month follow-up. This suggests that psychoeducation alone may be of significant benefit in reducing cannabis use in people with FEP.

Another CBT intervention has been designed to treat substance use more generally in psychosis, the Start Over and Survive (SOS) program, which is a 3-hour intervention offered over 6-9 sessions and usually completed within 7-10 days. The program initially focused on engagement while participants are acutely symptomatic, progressing to motivation enhancement and selection of goals for change. If participants identified these goals, specific plans were made within therapy and problem-solving strategies applied to expected high-risk situations (including avoiding high-risk situations, increasing enjoyable alternatives to substance use, and engaging supportive others). Social skills strategies (such as modelling and rehearsal) were used to practise drug refusal. SOS was associated with lower levels of substance use at 6 and 12 months, in contrast to standard care. However, those receiving SOS also had more support from families, so it is difficult to determine whether the intervention or family support was responsible for these findings [681]. To date there have been no studies in early psychosis focusing on treatment for alcohol dependence or abuse.

Box 31. Strategies for substance reduction (from Wade et al. 2009 [677]):

Setting realistic, achievable and short-term goals that are clearly defined in behavioural terms.

Providing regular monitoring of attempts to achieve goals

Engaging supportive others to assist with plan to reduce substance use

Encouraging the individual to keep list of reasons of wanting to change substance use to help maintain motivation

Teaching individual to challenge cognitions associated with substance use (e.g., positive drug expectancies) and/or negative affective states and to use problem solving to address high risk situations

Providing personalised handouts of plans to reduce substance use

Identifying high risk situations for substance

Practising refusal skills for use in high-risk situations

Providing education about cravings and withdrawal symptoms and practicing coping strategies to manage these difficulties

Developing a plan to deal with lapse of problematic substance use

Clinical practice suggests that acute withdrawal raises its own issues. Withdrawal management may include education on the symptoms of withdrawal and relaxation and coping skills to manage symptoms, detoxification (either homebased or inpatient, depending on the individual's needs), pharmacotherapy (especially for opiate and alcohol dependence), and specialist drug treatment services to advise on or manage detoxification or pharmacological interventions.

Pharmacological interventions may also be appropriate in managing various phases of the substance use reduction process, such as acute detoxification, craving reduction, and treatment of protracted withdrawal symptoms (see Tsuang et al 2005 [682] for a review of the pharmacological treatment of substance use disorders in schizophrenia).

Although no links have been detected between family burden and presence of comorbid substance use in FEP [631], data exists suggesting

a relationship between the two in chronic schizophrenia [683]. Good clinical care therefore requires an awareness that families of those with comorbid substance use and FEP may be particularly distressed and burdened, and require additional assistance.

Recommendations

- 3.3.14.1 Psychoeducation and CBT may help reduce substance use in those in the pre-onset phase GPP and with FEPB.
- 3.3.14.2 Treatment of psychosis and comorbid substance use (including tobacco use) should be integrated. GPP
- 3.3.14.3 Acceptance policies should be inclusive of individuals with comorbid substance use. GPP
- 3.3.14.4 Policies and procedures should be developed regarding substance use and its behavioural consequences, including the possibility of substance use while within the service. GPP
- 3.3.14.5 Services should develop minimum standards for clinicians regarding their knowledge about the assessment and integrated treatment of substance use. GPP
- 3.3.14.6 Where appropriate, clinicians should have access to specialist consultation to provide assessment, supervision, advice or comanagement for comorbid substance misuse (including tobacco use). GPP
- 3.3.14.7 Where people are receiving treatment within a drug treatment service, clinicians should actively collaborate and communicate about the individual treatment plan. GPP
- 3.3.14.8 Individual treatment plans should routinely include additional treatment goals relevant to substance use. GPP
- 3.3.14.9 Support should be offered to family and friends, including psychoeducation on comorbid mental illness and substance use. GPP
- 3.3.14.10 Discharge planning should include attention to ongoing treatment of substance use. GPP

Guideline 3.3.15. Treatment of psychiatric comorbidity

Comorbidity

Psychiatric comorbidities are common in people with early psychosis, and are often present before the first episode of psychosis occurs [230]. In addition, people with schizophrenia have a higher risk of anxiety and depressive disorders than the general population [232]. As many as 80–90% of people with FEP fulfil the diagnostic criteria for at least one comorbid psychiatric disorder [8]. Major depression, anxiety disorders (including social phobia and post-traumatic stress disorders) and obsessive-compulsive disorder can occur concurrently with FEP [8]. Comorbidity is also common in the UHR phase [684].

Depression and anxiety in people with psychosis are often associated with poorer outcomes such as increased hospitalisation rates and subjective assessment of psychosis-related difficulties [358]. Anxiety and depression levels are also related to rates of suicide and self-harm [14, 358, 359].

Comorbid substance use, including nicotine and alcohol, is common in people experiencing a first episode of psychosis [7], and may increase risk factors for relapse even in people who are adherent to their medication. Comorbid substance use is also associated with a worse prognosis in general, including more severe positive symptoms, longer periods of hospitalisation and poorer adherence to medication [7]. Defining the boundaries of comorbid conditions may be difficult due to the interaction between the symptoms of the primary disorder and those of comorbid conditions [8, 14, 232]. Periodic reassessment in people with FEP is often required [8, 14]. Therapeutic interventions are recommended when the presence of comorbidities impacts on the effective management of the primary psychotic disorder [8, 358]. Applying the stress-vulnerability model of psychosis would suggest that any source of stress should be addressed in assisting people to recover from early psychosis, and thus guideline-concordant treatment of any psychiatric comorbidities is recommended. Although it is beyond the scope of these guidelines to provide details of treatments for comorbidities, clinical guidelines are available and should be consulted in choosing treatments for comorbid conditions:

Royal Australian and New Zealand College of Psychiatrists https://www.ranzcp.org

The National Institute for Health and Care Excellence in the UK https://www.nice.org.uk

Phoenix Australia http://phoenixaustralia.org

NHMRC

https://www.nhmrc.gov.au

There is no empirical evidence relating to issues of sequencing in treatment of comorbidities in UHR and FEP, (i.e., whether it is more effective to sequentially treat, either pharmacologically or psychologically, psychotic symptoms and comorbid disorders or to treat them simultaneously as far as possible). There is mounting evidence that SGAs may have a direct antidepressant effect, as well as an indirect effect via improvement in psychotic symptoms[685]; this requires exploration in the emergent psychoses. Clinical experience suggests that treatment for acute psychosis would usually be prioritised with comorbid conditions becoming the focus of treatment after some recovery form psychosis has been achieved.

Recommendations

- 3.3.15.1 All people with early psychosis, regardless of comorbidities should receive treatment from early psychosis services. GPP
- 3.3.15.2 Clinicians should conduct comprehensive assessment of comorbidities and consider the impact of these, and adapt early psychosis treatment as appropriate. GPPP
- 3.3.15.3 Treatment of psychiatric comorbidity should be conducted in a consistent manner with available clinical guidelines. GPP
- 3.3.15.4 Although treatment of psychosis often remains paramount, the sequencing of treatment of comorbid conditions should be driven by the symptoms/disorder that is most distressing/disabling and whether it poses further risks to the person being treated or others. GPP

Guideline 3.3.16. Miscellaneous psychological therapies

There has been less specificity with respect to phase of intervention in other psychological therapies than in CBT. Other psychological interventions have included milieu therapy, psychodynamic therapy and family therapy. The latter is outlined in a previous section about family involvement and therapy (Guideline 3.3.9), while the former two are discussed below.

Milieu therapy

Milieu therapy [686] focuses on therapeutically designing everyday interactions and events in inpatient therapeutic communities to build social skills and confidence, generally in the absence of medication. Bola and Mosher [687] examined the impact of milieu therapy on a group of young people newly diagnosed with schizophrenia, and found that completing milieu therapy conferred greater advantages at 2-year follow-up than engaging in treatment as usual with respect to psychopathology, and those in the milieu therapy condition were less likely to be prescribed antipsychotic medication. Given the extended inpatient context of this model, however, its practical applicability is likely questionable.

Psychodynamic therapy

There is some evidence for the effectiveness of supportive psychodynamic therapy in treating FEP. A prospective, longitudinal, multicentre study in Denmark randomised 269 FEP participants into either 2 years of 'treatment as usual' or supportive psychodynamic psychotherapy (SPP). Broadly, SPP intervention focused on realistic cognition of psychosocial events, maintaining adaptive daily-living habits and interpersonal relationships and dealing with emotional experiences (i.e., 'support'), within a traditional psychodynamic framework - comprising a focus on working alliance, transference/countertransference, unconscious processes. The SPP group improved significantly on measure of both PANSS and GAF scores with large effect sizes at 2-year follow-up. Between groups analyses also showed improvement in global functioning and symptom reduction were significantly superior in the intervention group, relative to treatment as usual. However, these effects were not sustained at 5-year follow-up [688]. Additionally, methodological flaws and other considerations mean that this model may not, however, be feasible or justified in the Australian context.

Recommendations

3.3.16 Milieu therapy^C, supportive psychodynamic therapy^C, and cognitive remediation therapy^D may be useful in treating symptoms and/or improving functioning in FEP.

Guideline 3.3.17. Youth participation and peer support

Background

Consumer participation is an established right for users of the mental health system, and is endorsed in the National Standards for Mental Health Services [689]. Empirical research suggests that individuals who understand their health conditions and are actively involved in decisions about their own care value treatment programs more and have better health outcomes [690]. Participation provides an avenue for consumers to process their experiences and apply their experience to help the community, and it can have a positive effect on consumer health outcomes [690]. Participation should be genuine and valued. For example, in early psychosis services, young people should be invited to participate in relevant decision-making processes rather than participating after decisions have been made. The Consumer and Carer Participation Policy [691] of the National Mental Health Consumer and Carer Forum provides guidelines for all mental health organisations to develop and implement consumer participation.

Early psychosis services should involve young people in the planning, implementation and evaluation of their service, for the sake of both young people and the services themselves [692]. Early psychosis services should ensure that their processes are 'youth-friendly' and that sufficient support, training and resources are provided to facilitate the participation processes. A range of processes can be used to account for the differing abilities, interests and commitment of young people. Examples are outlined Box 32.

Peer support is considered an important part of youth participation. Peer support is described as 'a system of giving and receiving help founded on key principles of respect, shared responsibility and mutual agreement of what is helpful' [693]. The fundamental principle of peer support assumes that individuals with similar lived experiences can provide genuine empathy, support and hope to

each other. A peer support program allows young people to use their experience of treatment, care, diagnosis, common challenges and recovery to provide a message of hope to other young people and their families.

A meta-synthesis of qualitative research that examined 27 published studies of peer support in mental health services in the United States, United Kingdom, Canada and Australia found that recipients experienced increased social networks and wellness [694]. Repper and Carter conducted a review of both published and grey literature of peer support in mental health services in 2011. They found that peer support was associated with a reduction in hospital admission rates and length of admission. Additionally, it was shown that peer support improved social empowerment and increased independence. Other studies that were reviewed found that peer support resulted in improvements in self-esteem and confidence, and social support and social functioning [695].

Peer support also challenges self-stigma and fosters hope in the individuals who are recipients of peer support [695, 696]. Furthermore, some studies reported that peer support promotes hope and belief in recovery, empowerment, increase self-efficacy and social networks better than professional staff within mental health services [695].

In addition to helping the people receiving peer support services, peer support can also benefit the individuals who are providing the peer support service, as this can increase self-esteem and help with their ongoing recovery, as peer support workers identify value in gaining skills, which can help develop their personal growth [696, 697].

Peer support programs are run in Canada, the United States, the United Kingdom, New Zealand and Australia, and each program is run differently. Early psychosis services are encouraged to base their peer support program on the identified needs of the people using their service and their service goals.

Box 32. Ways to encourage youth participation:

- Ensure a clear and accessible feedback and complaints system with transparent resolution processes
- Develop a youth advisory group
- Facilitate youth representatives on boards and committees
- Facilitate youth involvement in staff selection
- Facilitate youth involvement in education programs
- Develop a peer support program that could include training peer workers to staff a 'drop in' support room or to visit inpatient units
- Staff support and a dedicated position to co-ordinate youth participation activities is required.

Box 33. Youth participation should be recognised for its contribution to the service, including:

- Payment for time contributed
- · Provision of travel subsidies
- Provision of childcare if required
- Provision for other supports to encourage involvement
- Provision of funding for training to facilitate participation (e.g., meeting procedure)
- Enabling development into more advanced roles

Recommendations

3.3.17.1 The culture of an early psychosis organisation should respect young people and encourage their input. GPP

3.3.17.2 All youth participation initiatives should be jointly planned with young people from the outset, and based on the needs and interests of young people. GPP

3.3.17.3 Early psychosis services should endeavour to establish a peer support component within their service. GPP

Guideline 3.3.18. Family participation and family peer support

Background

The National Standards for Mental Health Services state that carer participation is an established right for people who have a relative receiving services from the mental health system [689]. 'Family' refers to all family members, relatives, friends, and other people considered to be significant others by the person receiving care.

Early psychosis services should involve families in the planning, implementation and evaluation of their service. Families' expertise gained through their 'lived experiences' provides novel perspectives and skills about the treatment and care of people with early psychosis. Participation by families is likely to enable them to better manage their own circumstances, and provides an avenue for them to share their experiences with other families and clinicians, and to further develop the service.

Family participation can be developed in many ways to suit the different skills and interests displayed by families. Participation could include:

- a family working group comprised of staff and family for the purpose of developing services to families
- attendance at service planning meetings
- a family resource room managed by family peer support workers
- selection of family peer support workers to be trained to help and support other families
- family representation on boards and committees
- providing training to staff about family concerns
- family involvement in staff selection
- family participation in advocacy for better mental health services through the media and approaches to politicians.

Services can adopt a model of employing family peer support workers [698] with a primary function of supporting families. These workers can provide assistance and reassurance to families, having experienced the process of caring for a young person with emerging psychotic illness. This approach may be more acceptable to the person being treated than clinicians having contact with their family, given concerns about possible confidentiality breach. Commonly

identified needs of families include information and support [632]. Services need to ensure that sufficient support, training and resources are provided to family peer support workers to fulfil their roles. Clinicians should understand that family peer support workers are there to help other families, as well as to support clinicians in their interactions with families. Appropriate remuneration, training and support should be provided to family peer support workers. Leggatt [632] provides a detailed description of a family peer support program.

Box 34. Family peer support worker training

Training for family peer support workers may include:

- Ways to use 'lived experiences of psychosis' to help other families. This involves comparing the differences between mental and physical illnesses and between experiential and professional knowledge.
- Telephone and face-to-face support. Active listening for telephone and face-to-face support, working with culturally diverse families and reducing emotional tension through active support.
- Helping family carers cope in first-episode mental illness.
- Management of illness behaviour. Learning to manage difficult behaviours; finding the fine dividing line between under- and overstimulation of the young person; developing a calm response; reaching mutual agreements.
- Ways to help families understand the mental health system.
- Managing boundary issues. Understanding the relationship between family peer support workers and the family being supported; working alongside clinicians; self-care and supervision.
- Facilitating a support group [677].

Recommendations

3.3.18.1 Early psychosis services should endeavour to establish a family peer support component within their service. GPP

3.3.18.2 Families participating in the service should receive some payment, and funding should be available to allow family peer support workers to acquire any specialist skills that they may need in their role. Family peers support workers should also receive training, ongoing supervision and support from a clinical mentor. GPP

Guideline 4. Diversity and specific populations

Guideline 4.1. Aboriginal and Torres Strait Islander communities

Background

There is no conclusive national data relating to the prevalence of psychiatric disorders broadly, or psychotic disorders specifically, among Aboriginal and Torres Strait Islander peoples. The data which exists is limited to hospitalisation and mortality, and it suggests that Aboriginal and Torres Strait Islander people have a 3-5 times greater risk of being admitted involuntarily than non-Aboriginal people, that Aboriginal people are admitted to hospital for 'mental and behavioural disorders' at a higher rate than non-Aboriginal people, and that the rate of hospitalisation for 'mental and behavioural disorders' secondary to psychoactive substance use is 4-5 times higher than in the general population [699, 700]. Death rates from suicide in Indigenous people are around twice the rate of the non-Indigenous community, with the young adult years being a period of particularly high risk [701]. Individual and community experiences that may in part account for these figures include social exclusion and marginalisation, stress/trauma (including historically and currently, leading to increased exposure to psychosocial stressors and violence), and substance use.

Many initiatives have been developed for Aboriginal and Torres Strait Islander communities through state and territory mental health programs, but few have specifically addressed early psychosis. Until clinical expertise is better developed in this area, it is recommended that early psychosis services consult with local Aboriginal mental health professionals.

A useful resource on providing mental health services to Aboriginal and Torres Strait Islander people is the Aboriginal Mental Health First Aid Training and Research Program's guidelines on cultural considerations and communications techniques. The key points of these guidelines are outlined in Box 35.

Box 35. Key principles in working with Aboriginal and Torres Strait Islander communities

- Learn about the other person's culture and their concept of mental illness
- Know what is normal, and what is not, in the person's culture
- Know what is culturally appropriate communication
- Do not shame the person, their family, or their community
- Use community and family supports

Of particular relevance in treatment of psychotic symptoms in Aboriginal and Torres Strait Islander people is the need to be aware of the physical side effects of antipsychotics; failure to monitor these appropriately could be particularly problematic for these individuals given higher rates of medical difficulties in general and specifically disorders that can also emerge consequent to antipsychotic medication (such as cardiovascular disease, diabetes, and obesity).

The CAARMS may also require some modification in order for its use to be valid in Aboriginal peoples, given recent data suggesting its use leads to greater 'false positives' in Aboriginal than non-Aboriginal people [702].

Recommendations

- **4.1.1** Clinicians should be especially alert to the side effects of antipsychotics when working with people from Aboriginal and Torres Strait Islander communities. ^{GPP}
- **4.1.2** Indigenous health or mental health practitioners should be involved in the assessment and treatment of Indigenous people with emerging psychosis to facilitate engagement and reduce stigma. GPP
- 4.1.3 Clinicians should practice in a manner consistent with relevant guidelines on working with people from Aboriginal and Torres Strait Islander communities (e.g., Aboriginal Mental Health First Aid Training and Research Program, 2008). GPP

Guideline 4.2. Culturally and linguistically diverse communities

Background

People from non-English speaking backgrounds (NESB) are less likely to be consumers of mental health services (both inpatient and outpatient) than the Australian-born population, but are more likely to be admitted involuntarily in the context of mental health treatment [703]. A key element of providing psychiatric care is facilitating communication, a process which can become more complicated when working with people from NESB, whose English proficiency can be more limited. If not sufficiently addressed, this can lead to misdiagnosis and inappropriate treatment. This requires not only working with interpreters when appropriate (see standard 1.7, National Standards for Mental Health Services [689]: 'The mental health service upholds the right of the consumer and their carers to have access to accredited interpreters'), but also working with them effectively. Relevant guidelines offer suggestions about key principles in this area (e.g., see the Victorian Transcultural Mental Health website: http://www.vtmh.org.au/resources/interpreterresources-1) and are summarised in Box 36.

Box 36. Good practice in working with interpreters in mental health settings

- Ensure that you know which language (and dialect) the consumer speaks: do not assume the language spoken from the consumer's country of birth.
- Check whether there may be an ethno-political divide between consumer and interpreter.
- Check whether the gender of the interpreter is important to the interview.
- Ensure that the interpreter knows the purpose of the interview.
- Be aware of the needs of the interpreter (particularly in stressful and difficult circumstances)
 and keep in mind the complexity of the interpreter's task.
- Introduce all people present to one another and explain the role of each person.
- Explain to the consumer and carers/family members that the interpreter is bound by a code of ethics and is required to observe confidentiality.
- Speak to the consumer directly: do not say to the interpreter "Ask her if..."
- Use short simple sentences and speak in plain English, avoiding the use of jargon, slang, and colloquialisms.
- Allow enough time for questions and answers to be interpreted this may extend the time needed for the interview.
- Do not ask for a 'literal translation' as mental health terms may not have a direct translation in the consumer's language. The interpreter's role is to convey an equivalent meaning.
- Be aware that the interpreter is not a mental health expert and should not be asked about the mental state of the consumer.
- Although the interpreter may be asked about cultural background issues, he/she is not a cultural consultant, and may be from a different class or culture to the consumer.
- Review the session with the interpreter after the interview, and ask whether there were any interpreting difficulties.
- Include the interpreter in any debriefings necessitated by incidents or occurrences that he or she was party to.

Adapted from: Miletic et al. [704]

It is important to bear in mind that issues in accessing services, assessment, and treatment may still emerge if someone is proficient in English, but they or their family are overseas-born. These include challenges of resettlement and acculturation for young people and/or their families, such as contending with any history of trauma experienced in a country of origin, 'parentification' of children if they are the key nexus of interaction between their family and the dominant society, cross-generational conflict that may at times represent conflict between the original and new cultures, and racism and media stereotypes [705]. Principles of working with people from Aboriginal and Torres Strait Islander communities also apply to people not born in Australia. Various state bodies provide useful resources covering practical strategies to address common challenges in working with people from NESB (e.g., Victorian Transcultural Mental Health Unit).

Recommendations

- **4.2.1** People with early psychosis or family members who cannot speak English, or who speak limited English, should be able to access professional interpreting and translating services. ^{GPP}
- **4.2.2** Clinicians should refer to appropriate guidelines when working with interpreters and have training and support for this work. GPP
- **4.2.3** Clinicians should seek education and advice about the cultures of the young people and families that they work with in order to practice in culturally-sensitive ways. They should seek training, and supervision for this work and be supported in this by their early psychosis service. ^{GPP}

Guideline 4.3. Rural and remote populations

Background

There is limited data comparing the prevalence of early psychosis in urban and regional/remote areas. However, young people who do not live in major population centres may experience considerable difficulties in accessing specialised mental health care. This may be because of lack of service providers, fear of stigma, stoicism or travel and financial barriers [706-708]. Some progress has been made towards remedying this situation in Australia with federal funding for psychological services (Access to Allied Psychological Services projects, funded under the Better Outcomes in Mental Health Care initiative); the uptake of these services has been proportionally greater in rural/remote than urban areas (Morley et al., 2007).

Box 37. Features of early psychosis services in rural/remote communities [709]

- Community education campaigns to raise awareness of early psychosis and support early intervention
- Strong GP liaison and primary care structures
- Accessible expert consultation, such as via telepsychiatry
- Availability of clinical guidelines and protocols

Regardless of availability of services, what may be suitable for a densely populated urban area may not be appropriate for rural areas that do not have a critical mass of incidence of early psychosis [710]. In reviewing the three studies that have detailed provision of early psychosis services in rural/remote communities, two in Australia [711, 712] and another in Canada [713], Welch and Welch [709] noted some common features between the services, outlined in Box 37. Further exploration is necessary to establish what constitutes the most effective service delivery for early psychosis in rural/remote areas, including an examination of the prevalence and context of early psychosis in rural/remote communities, to ensure early psychosis services are appropriately tailored to this group.

Recommendations

- **4.3.1** Early psychosis prevention and intervention information should be readily available at key locations in rural and remote areas, for example in GPs' waiting rooms and community centres. GPP
- **4.3.2** Mental health services should provide tertiary consultation and education services to health practitioners in rural and remote areas. ^{GPP}
- **4.3.3** Telepsychiatry and other technological facilities should be made available to mental health practitioners in rural and remote areas to facilitate links with early psychosis services. These should not, however, be seen as a replacement for visiting specialists [348]. GPP

Guideline 4.4. LGBTIQ - Same-sex attracted and gender diverse

Box 38. Definitions in LGBTIQ

Lesbian An individual identifying as a woman whose primary emotional or sexual attraction is towards other women.

Gay An individual whose primary emotional and sexual attraction is towards people of the same sex. The term is most commonly applied to men, although some women use this term.

Bisexual An individual who is sexually and emotionally attracted to people of both sexes.

Transgender An individual whose gender identity does not match the gender they were assigned at birth.

Intersex An individual who is born with physical, hormonal or genetic features that are neither wholly female nor wholly male; or a combination of female and male; or neither female nor male.

Queer An umbrella term that includes a range of alternative sexual and gender identities, including gay, lesbian, bisexual and transgender.

Gender identity An individual's sense of identity defined in relation to the categories male and female. Some people may identify as both male and female while others may identify as male in one setting and female in other. Others identify as androgynous or intersex without identifying as female or male.

Gender expression The way in which someone chooses to physically express their gender, through name, pronoun, clothing, haircut, mannerisms, etc. This is not the same as gender identity, which refers to an internal sense of one's own gender.

Gender diverse Not all individuals who identify as a gender different to that assigned at birth necessary identify as strictly male or female. Gender diverse acknowledges the many different ways people may identify their gender (e.g., genderqueer, non-binary, agender and gender-fluid).

Transition The process by which a gender diverse person affirms their gender, whether through name change, clothing or medical support, etc. Some people may do all or none of these things, for a range of reasons. It is important to remember that gender is an internal sense of self. There is no right or wrong way to transition.

Same-sex attracted An individual who is attracted to people of the same sex. This is a sexual orientation, not a gender identity.

Background

People who consider themselves lesbian, gay, bisexual, transgender, intersex or queer (LGBTIQ) comprise approximately 11% of Australia's population [714]. LGBTIQ young people are subjected to lower levels of parental support [715], higher rates of physical and verbal abuse [716, 717], discrimination and stigma [718] and homelessness [719, 720], and have higher rates of substance use [715, 721], all factors associated with increased risk of psychosis.

In Australia, LGBTIQ people have higher incidences of all types of mental illness [722]. Two studies in comparable countries have found that LGBTIQ people have 3–4 times higher rate of psychosis than non-LGBTIQ people [723,

724]. More research is needed investigating early psychosis and LGBTIQ young people in order to formulate targeted clinical practice points.

Young people aged 16–24 are most likely to hide their sexuality or gender identity [722] (relative to other age groups). In 2014, one study reported 16% of same-sex attracted Australian young people have attempted suicide [716], while another study reported 38% of intersex and transgender Australian young people have had suicidal ideation and not reported this to a medical professional [717]. Clinicians should therefore include questions that explore gender and/or sexual identity as part of routine assessment. Linking the individual with specialised LGBTIQ services, relevant support networks, including (where appropriate) seeking support from peers, and teachers facilitates wellbeing [717]. Family

support predicts greater self-esteem, and is protective against depression, substance use and suicidal ideation/behaviours [725] in young LGBTIQ people, and may therefore be a focus for intervention.

It is important to acknowledge the key role that 'minority stress' [726] (stress arising from negative social attitudes and discriminatory practices) has in the psychological wellness of LGBTIQ young people. Two large independent general population samples (total *N* in excess of 10 000) reported a higher incidence of psychotic symptoms in lesbian, gay or bisexual participants, compared with heterosexual people [727]. Importantly, minority stress (in particular bullying, discrimination, and trauma) partly contributes to the association between LGBTIQ status and psychotic symptoms. Minority stress is therefore an important mechanism by which LGBTIQ people are at increased risk for psychosis. When undertaking a mental health assessment, clinicians should therefore be mindful of, and identify the circumstances and stressors common to LGBTIO people that are also risk-factors for psychosis. It is important that clinicians are familiar with, and able to use appropriate terms and language around gender diversity (see Box 38 above).

Recommendations

4.4.1 Clinicians should avoid assuming what a young person's gender identity or sexual attraction is. This should be ascertained as part of a comprehensive mental health assessment. GPP

4.4.2 Clinicians should pay careful attention to risk and its assessment in LGBTIQ people. GPP

4.4.3 Clinicians should identify and address stressors that LGBTIQ young people have that also comprise risk factors for psychosis (i.e., by referring to specialised LGBTIQ services, building coping strategies and resilience in response to potential bullying, discrimination, and trauma). GPP

4.4.4 LGBTIQ young people should be linked with supportive communities, and group support networks. GPP

Guideline 4.5. Young people experiencing homelessness

Background

Between the ages of 15–25, biological, social and vocational skills are acquired that enable independent living. Home-leaving is an important part in the emergence of adult identity and social roles. When psychosis co-occurs with homelessness, there is a greater likelihood of a deficit in skills required for independent living, and a greater need for these same skills to survive.

There is a longstanding, bidirectional association between homelessness and mental illness [728]. In the last Australian Census (2011) the population of young people (12–24 years old) experiencing homelessness was estimated to be 26 238, or 25% of the homeless population. The Cost of Youth Homelessness in Australia Survey found that 53% of young people experiencing homelessness have a diagnosed mental illness, of which 14% report a psychotic disorder [729].

Stable housing is a key part of recovery from mental health issues. Without a stable home, young people can struggle to work on recovery goals, such as engaging in employment or education [730]. Moreover, the longer that people are homeless, the more likely they are to develop severe and persistent mental health issues [731] and are less likely to adhere to treatment [732].

Wherever possible the aim is to prevent homelessness and intervene when someone is at risk of homelessness. It is therefore a key part of the clinician's role to take a proactive approach in both early intervention and prevention of homelessness as well as practical based support for those that are homeless. Recognising the risk factors associated with homelessness is therefore essential. Risk factors include early exit from education, family breakdown, financial hardship, unemployment [729], criminality, and substance use [733]. Young people at risk of homelessness should be referred to housing services in the local area. Most specialist housing services accept referrals for young people who are homeless and at risk of homelessness. A collaborative response with both services is best practice in this area. A key role for clinicians is to advocate for the young person within homelessness services and assist with service navigation[734].

A focus on development of independent living skills such as budgeting, money management, social skills and problem solving is important to facilitate stable housing [734]. Young people who are homeless are less likely to be employed, have greater difficulty becoming employed and are less likely to be educated [729]. Clinicians working with young people should widen the social and vocational opportunities for young people in order to improve housing stability and satisfaction [735].

Young people experiencing homelessness and mental health issues are less likely to have family or social support and in some cases the complex mental health issues can contribute to homelessness. Family work is important when working with both psychosis and homelessness. Improved familial relationships is a key reason for young people returning to their family home and is a key area for prevention of homelessness when working with young people at risk of homelessness [734, 736-738].

Recommendations

- **4.5.1** Early psychosis clinicians should recognise that stable, secure and appropriate housing is essential to recovery from mental illness and the maintenance of wellness. GPP
- **4.5.2** Early psychosis clinicians should recognise risk factors for homelessness in people with early psychosis in order to intervene early. GPPP
- **4.5.3** Early psychosis services should partner and collaborate with youth homelessness services in order to facilitate access to services and coordinated care. GPP
- **4.5.4** Early psychosis clinicians should focus on the development of independent living skills in their young people with early psychosis. GPP
- **4.5.5** Early psychosis clinicians should work on maintaining and improving familial relationships even if a young person is homeless. GPP

Appendices

Glossary of terms

•••••••••••••••••••••••••••••••••••••••				
Acute phase	The period in which a person is experiencing frank psychotic symptoms (positive symptoms). It begins when active symptoms commence and finishes when symptoms have remitted.			
Adolescence	A stage of mental and physical development occurring between childhood and adulthood where many transitions occur. Generally occurs between the ages of 13 and 19, but may vary.			
At risk mental state (ARMS or ARMS-P)	A state in which predictive criteria are met in which someone has an increased chance of experiencing a psychotic illness.			
Attenuated psychotic symptoms	Symptoms that are of a reduced intensity or frequency. Not severe enough or sufficiently frequent to elicit a psychosis diagnosis.			
Brief limited psychotic symptoms (BLIPS)	A brief period of threshold-level psychotic symptoms that spontaneously resolve.			
Duration of untreated illness (DUI)	Time interval between the first onset of psychiatric symptoms and initiation of treatment for psychosis. This includes the period during which psychotic symptom develop (i.e., the prodrome).			
Duration of untreated psychosis (DUP)	Time interval between the onset of psychotic symptoms and initiation of treatment.			
Early intervention	Interventions targeting people displaying the early signs and symptoms of a mental health problem or mental disorder. Early intervention also encompasses the early identification of people suffering from a first episode of disorder.			
Early psychosis	While there is no single authoritative definition of 'early psychosis', it clearly has an onset focus. It includes the period described retrospectively as the 'prodrome' or prospectively as the UHR phase, and is also considered to include the critical period up to 5 years from entry into treatment for the first episode.			
First episode psychosis	The first onset of a psychotic disorder in the lifetime of an individual.			
Frank psychosis	Presence of prominent positive psychotic symptoms.			
Functional recovery	A recovery in which there has been improvement in the person's practical life skills and ability to fulfill appropriate social and occupational roles.			
Incomplete recovery phase	A phase in which active symptoms and/or functional impairment remains whilst clinical intervention is being undertaken.			
Negative psychotic symptoms	The group of symptoms that are characterised by the absence or loss of experience. Examples include decreased speaking, decreased emotional reactions and reduced drive to do things.			
Positive psychotic symptoms	Positive symptoms are characterized by the presence of unusual feelings, thoughts or behaviours. Positive symptoms include such experiences as hallucinations or delusions. A hallucination could be hearing voices that no one else can hear, or seeing things that are not really there.			
Pre-morbid phase	A period before someone develops an illness. Normal development and activity is occurring.			

Prodrome (prodromal)	A medical term describing a symptom or group of experiences that precede definitive symptoms of a disorder.			
Psychosis prodrome	Retrospective concept – after someone has experienced an acute psychosis, the prodrome is the period preceding the psychosis during which symptoms develop and behaviour change is noticed.			
Psychosis	A condition in which there is misinterpretation and misapprehension of the nature of reality as reflected in certain symptoms, particularly disturbances in perception (hallucinations), disturbances of belief and interpretation of the environment (delusions), and disorganised speech patterns (thought disorder).			
Psychosis spectrum	An illness in which the symptoms involve psychosis. Includes schizophrenia, bipolar disorder, and major depressive disorder with psychotic features.			
Schizophrenia spectrum	An illness in which the diagnostic features fit within the family of schizophrenia illnesses. Includes, but is not limited to: schizophrenia, schizophreniform psychosis, delusional disorder, schizoaffective disorder, and brief psychotic disorder.			
Ultra high risk (UHR)	A state in which specific predictive criteria are met which indicate that the person has an increased chance of transitioning to a psychotic illness in the future.			
Vulnerability to psychosis	An increased risk of developing the symptoms of psychosis due to various factors.			
Youth	A description of an age range that overlaps the periods of adolescence and young adulthood. Generally defined as between the ages of 15 and 25.			

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Contributors to the first edition

Dr J Edwards D Albiston

Central Coast Area Health

Service - NSW

C Curran

Dr P Dignam Dr N Ford

C Gardner

Gold Coast Psychiatric

Services - QLD

B Hoclding

Dr H Hustig

Associate Professor H Jackson

J Jones

Associate Professor F Judd

V Miller

M Mooney

Dr P Morgan

Dr L Nash

W Radcliffe

K Robinson

V Ryan

K Scanlon

Professor B Singh

Western Australian NEPP

Steering Committee

Western Sydney Area Mental

Health Service

Swan Hill Community Mental

Health Services

L O'Brien

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Professor Patrick McGorry

(Project Director)

Kerryn Pennell

(National Project Manager)

Hilary Berry, Northern Territory

(State Coordinator)

Bernadette Dagg, New South Wales

(State Coordinator)

Stephen Haines, Victoria (State Coordinator)

Peter Handley, Tasmania

(State Coordinator)

Amanda Urbanc, Australian

Capital Territory (State

Coordinator)

Christopher Wigg, South

Australia

(State Coordinator)

Julie Kempton, Queensland

(State Coordinator)

Bernadette Pound, Western

Australia

(State Coordinator)

Further information on early psychosis services go to www.iepa.org.au

References

- World Health Organization, Defining Sexual Health: Report of a technical consultation on sexual health, 18-31 January. Geneva: WHO 2002
- Phillips, L. & Francey, S., Changing PACE: Psychological interventions in the pre-psychotic phase, in Psychological interventions in early psychosis: a treatment handbook, McGorry, P.D., & Gleeson, J., Editors, 2004, John Wiley: Chichester.
- Yung, A.R., Phillips, L. & McGorry, P.D., Treating schizophrenia in the prodromal phase. 2004, London: Taylor and Francis.
- De Hert, M., Detraux, J., van Winkel, R., Yu, W., & Correll, C.U., Metabolic and cardiovascular adverse effects associated with antipsychotic drugs. Nature Reviews Endocrinology, 2012. 8(2): p. 114-126.
- Abdel-Baki, A., Ouellet-Plamondon, C. & Malla, A., Pharmacotherapy challenges in patients with first-episode psychosis. J Affect Disord, 2012. 138 Suppl: p. S3-14.
- Allison, D.B. & Casey, D.E., Antipsychotic-induced weight gain: a review of the literature. J Clin Psychiatry, 2001. 62 Suppl 7: p. 22-31
- Barnes, T.R. Schizophrenia Consensus Group of British Association for Psychopharmacology. Evidence-based guidelines for the pharmacological treatment of schizophrenia: recommendations from the British Association for Psychopharmacology. J Psychopharmacol, 2011. 25(5): p. 567-620.
- Lambert, M., Initial assessment and initial pharmacological treatment in the acute phase, in *The Recognition and Management of Early Psychosis: A Preventative Approach*, Jackson, H.J., & McGorry, P.D., Editors. 2009, Cambridge University Press. p. 177-200.
- Lewis, R.W., Fugl-Meyer, K.S., Corona, G., Hayes, R.D., Laumann, E.O., Moreira Jr, E.D., ... Segraves, T., Original articles: definitions/ epidemiology/risk factors for sexual dysfunction. J Sex Med, 2010. 7(4pt2): p. 1598-1607.
- Smith, S. & Herlihy, D., Sexuality in psychosis: dysfunction, risk and mental capacity. Advances in Psychiatric Treatment, 2011. 17(4): p. 275-282.
- Taylor, M. & Ng, K.Y., Should long-acting (depot) antipsychotics be used in early schizophrenia? A systematic review. Aust N Z J Psychiatry, 2013. 47(7): p. 624-30.
- Masi, G. & Liboni, F., Management of schizophrenia in children and adolescents: focus on pharmacotherapy. Drugs, 2011. 71(2): p. 179-208.
- Lambert, M., Conus, P., Lambert, T., & McGorry, P.D., Pharmacotherapy of first-episode psychosis. Expert Opin Pharmacother, 2003. 4(5): p. 717-50.
- 14. Lambert, M. & Naber, D., *Current schizophrenia*. 3rd ed. 2012, London, UK.: Springer Healthcare.
- McGorry, P.D., Killackey, E. & Yung, A., Early intervention in psychosis: concepts, evidence and future directions. World Psychiatry, 2008. 7(3): p. 148-56.
- Craig, T.K., Garety, P., Power, P., Rahaman, N., Colbert, S., Fornells-Ambrojo, M., & Dunn, G., The Lambeth Early Onset (LEO) Team: randomised controlled trial of the effectiveness of specialised care for early psychosis. BMJ, 2004. 329(7474): p. 1067
- Marshall, M., Lewis, S., Lockwood, A., Drake, R., Jones, P., & Croudace, T., Association between duration of untreated psychosis and outcome in cohorts of first-episode patients: a systematic review. Arch Gen Psychiatry, 2005. 62(9): p. 975-83.
- Melle, I., Johannesen, J.O., Friis, S., Haahr, U., Joa, I., Larsen, T.K., ... McGlashan, T., Early detection of the first episode of schizophrenia and suicidal behavior. Am J Psychiatry, 2006. 163(5): p. 800-4.

- Melle, I., Larsen, T.K., Haahr, U., Friis, S., Johannessen, J.O., Opjordsmoen, S., ... McGlashan, T., Reducing the duration of untreated first-episode psychosis: effects on clinical presentation. Arch Gen Psychiatry, 2004. 61(2): p. 143-50.
- Perkins, D.O., Gu, H., Boteva, K., & Lieberman, J.A., Relationship between duration of untreated psychosis and outcome in firstepisode schizophrenia: a critical review and meta-analysis. Am J Psychiatry, 2005. 162(10): p. 1785-804.
- Petersen, L., Nordentoft, M., Jeppesen, P., Ohlenschaeger, J., Thorup, A., Christensen, T.O., ... Jorgensen, P., Improving 1-year outcome in first-episode psychosis: OPUS trial. Br J Psychiatry Suppl, 2005. 48: p. s98-103.
- Bertelsen, M., Jeppesen, P., Petersen, L., Thorup, A., Ohlenschlagger, J., le Quach, P., ... Nordentoft, M., Five-year follow-up of a randomized multicenter trial of intensive early intervention vs standard treatment for patients with a first episode of psychotic illness: the OPUS trial. Arch Gen Psychiatry, 2008. 65(7): p. 762-71.
- Mihalopoulos, C., Harris, M., Henry, L., Harrigan, S., & McGorry, P., Is early intervention in psychosis cost-effective over the long term? Schizophr Bull, 2009. 35(5): p. 909-18.
- Friis, S., Vaglum, P., Haahr, U., Johannessen, J.O., Larsen, T.K., Melle, I., ... McGlashan, T.H., Effect of an early detection programme on duration of untreated psychosis: part of the Scandinavian TIPS study. Br J Psychiatry Suppl, 2005. 48: p. 579-37
- Gafoor, R., Nitsch, D., McCrone, P., Craig, T.K., Garety, P.A., Power, P., & McGuire, P., Effect of early intervention on 5-year outcome in non-affective psychosis. Br J Psychiatry, 2010. 196(5): p. 372-6.
- McCrone, P., Craig, T.K., Power, P., & Garety, P.A., Costeffectiveness of an early intervention service for people with psychosis. Br J Psychiatry, 2010. 196(5): p. 377-82.
- McGlashan, T.H., Zipursky, R.B., Perkins, D., Addington, J., Miller, T.J., Woods, S.W., ... Breier, A., The PRIME North America randomized double-blind clinical trial of olanzapine versus placebo in patients at risk of being prodromally symptomatic for psychosis. I. Study rationale and design. Schizophr Res, 2003. 61(1): p. 7-18.
- McGorry, P.D., Yung, A.R., Phillips, L.J., Yuen, H.P., Francey, S., Cosgrave, E.M., ... Jackson, H., Randomized controlled trial of interventions designed to reduce the risk of progression to firstepisode psychosis in a clinical sample with subthreshold symptoms. Arch Gen Psychiatry, 2002. 59(10): p. 921-8.
- Morrison, A.P., French, P., Walford, L., Lewis, S.W., Kilcommons, A., Green, J., ... Bentall, R.P., Cognitive therapy for the prevention of psychosis in people at ultra-high risk: randomised controlled trial. Br J Psychiatry, 2004. 185: p. 291-7.
- Hafner, H. & Maurer, K., Early detection of schizophrenia: current evidence and future perspectives. World Psychiatry, 2006. 5(3): p. 130-8.
- McGorry, P.D., Early intervention in psychotic disorders: beyond debate to solving problems. Br J Psychiatry Suppl, 2005. 48: p. s108-10.
- Edwards, J. & McGorry, P.D., Implementing early intervention in psychosis: a guide to establishing early psychosis services. 2002, London: Martin Dunitz.
- International Early Psychosis Association Writing Group, International clinical practice guidelines for early psychosis. Br J Psychiatry Suppl, 2005. 48: p. s120-4.
- Bertolote, J. & McGorry, P.D., Early intervention and recovery for young people with early psychosis: consensus statement. Br J Psychiatry Suppl, 2005. 48: p. s116-9.
- National Health Medical Research Council of Australia, NHMRC levels of evidence and grades for recommendations for developers of guidelines. 2009, National Health and Medical Research Council of Australia: Canberra.

- American Psychiatric Association, Diagnostic and Statistical Manual of Mental Disorders, 5th Edition. 2013, Washington DC: American Psychiatric Association.
- World Health Organization, International Statistical Classification of Diseases and Related Health Problems. 1992, Geneva: World Health Organization.
- Baldwin, P., Browne, D., Scully, P.J., Quinn, J.F., Morgan, M.G., Kinsella, A., ... Waddington, J.L., Epidemiology of first-episode psychosis: illustrating the challenges across diagnostic boundaries through the Cavan-Monaghan study at 8 years. Schizophr Bull, 2005. 31(3): p. 624-38.
- Caton, C.L., Hasin, D.S., Shrout, P.E., Drake, R.E., Dominguez, B., First, M.B., ... Schanzer, B., Stability of early-phase primary psychotic disorders with concurrent substance use and substanceinduced psychosis. Br J Psychiatry, 2007. 190: p. 105-11.
- Rahm, C. & Cullberg, J., Diagnostic stability over 3 years in a total group of first-episode psychosis patients. Nord J Psychiatry, 2007. 61(3): p. 189-93.
- Salvatore, P., Baldessarini, R.J., Tohen, M., Khalsa, H.M., Sanchez-Toledo, J.P., Zarate, C.A., Jr., ... Maggini, C., McLean-Harvard International First-Episode Project: two-year stability of DSM-IV diagnoses in 500 first-episode psychotic disorder patients. J Clin Psychiatry, 2009. 70(4): p. 458-66.
- Schimmelmann, B.G., Conus, P., Edwards, J., McGorry, P.D., & Lambert, M., Diagnostic stability 18 months after treatment initiation for first-episode psychosis. J Clin Psychiatry, 2005. 66(10): p. 1239-46.
- 43. Whitty, P., Clarke, M., McTigue, O., Browne, S., Kamali, M., Larkin, C., & O'Callaghan, E., Diagnostic stability four years after a first episode of psychosis. Psychiatr Serv, 2005. **56**(9): p. 1084-8.
- 44. McGorry, P.D. & Yung, A.R., Early intervention in psychosis: an overdue reform. Aust N Z J Psychiatry, 2003. 37(4): p. 393-8.
- McGorry, P.D. & Singh, B.S., Schizophrenia: risk and possibility, in Handbook of studies on preventive psychiatry., Raphael, B., & Burrows, G.D., Editors. 1995, Elsevier: Amsterdam. p. 491-514.
- 46. Zubin, J. & Spring, B., Vulnerability--a new view of schizophrenia. J Abnorm Psychol, 1977. 86(2): p. 103-26.
- Eaton, W.W. & Harrison, G., Epidemiology and social aspects of the human genome. Curr Opin Psychiatry, 1998. 11(2): p. 165-168.
- 48. McGorry, P.D., Psychotic disorders, in *Foundations of clinical psychiatry*, Bloch, S., & Singh, B.S., Editors. 1994, Melbourne University Press: Melbourne. p. 220-242.
- Nicholson, I. & Neufeld, R.W.J., A dynamic vulnerability perspective on stress and schizophrenia. Am J Orthopsychiatry, 1992. 62(1): p. 117-130.
- Yank, G., Bentley, K. & Hargrove, D., The vulnerability-stress model of schizophrenia: Advances in psychosocial treatment. Am J Orthopsychiatry, 1993. 63(1): p. 55-69.
- Hultman, C.M., Ohman, A., Cnattingius, S., Wieselgren, I.M., & Lindstrom, L.H., Prenatal and neonatal risk factors for schizophrenia. Br J Psychiatry, 1997. 170: p. 128-33.
- Olin, S.C. & Mednick, S.A., Risk factors of psychosis: identifying vulnerable populations premorbidly. Schizophr Bull, 1996. 22(2): p. 223-40.
- Weinberger, D. & Berger, G.E., Genetic vulnerability, in The recognition and management of early psychosis: a preventive approach. 2009, Cambridge University Press: Cambridge. p. 21.46
- 54. Rustin, M., Psychotic states in children. 1997, New York: Routledge.
- Baron, M. & Gruen, R., Risk factors in schizophrenia. Season of birth and family history. Br J Psychiatry, 1988. 152: p. 460-5.

- Hettema, J.M., Walsh, D. & Kendler, K.S., Testing the effect of season of birth on familial risk for schizophrenia and related disorders. Br J Psychiatry, 1996. 168(2): p. 205-9.
- 57. Cooper, C., Morgan, C., Byrne, M., Dazzan, P., Morgan, K., Hutchinson, G., ... Fearon, P., *Perceptions of disadvantage*, ethnicity and psychosis. Br J Psychiatry, 2008. **192**(3): p. 185-90.
- Shevlin, M., Dorahy, M.J. & Adamson, G., Trauma and psychosis: an analysis of the National Comorbidity Survey. Am J Psychiatry, 2007. 164(1): p. 166-9.
- Cuesta, M.J., Gil, P., Artamendi, M., Serrano, J.F., & Peralta, V., Premorbid personality and psychopathological dimensions in firstepisode psychosis. Schizophr Res, 2002. 58(2-3): p. 273-80.
- 60. Dalkin, T., Murphy, P., Glazebrook, C., Medley, I., & Harrison, G., *Premorbid personality in first-onset psychosis*. Br J Psychiatry, 1994. **164**(2): p. 202-7.
- Hafner, H. & Nowotny, B., Epidemiology of early-onset schizophrenia. Eur Arch Psychiatry Clin Neurosci, 1995. 245(2): p. 80-92.
- van Os, J., Hanssen, M., Bijl, R.V., & Vollebergh, W., Prevalence of psychotic disorder and community level of psychotic symptoms: an urban-rural comparison. Arch Gen Psychiatry, 2001. 58(7): p. 663-8.
- Haroun, N., Dunn, L., Haroun, A., & Cadenhead, K.S., Risk and protection in prodromal schizophrenia: ethical implications for clinical practice and future research. Schizophr Bull, 2006. 32(1): p. 166-78.
- 64. Kim, E., Lauterbach, E.C., Reeve, A., Arciniegas, D.B., Coburn, K.L., Mendez, M.F., ... Coffey, E.C., Neuropsychiatric complications of traumatic brain injury: a critical review of the literature (a report by the ANPA Committee on Research). J Neuropsychiatry Clin Neurosci, 2007. 19(2): p. 106-27.
- Phillips, L.J., Francey, S.M., Edwards, J., & McMurray, N., Stress and psychosis: towards the development of new models of investigation. Clin Psychol Rev, 2007. 27(3): p. 307-17.
- Pantelis, C., Yucel, M., Bora, E., Fornito, A., Testa, R., Brewer, W.J., ... Wood, S.J., Neurobiological markers of illness onset in psychosis and schizophrenia: The search for a moving target. Neuropsychol Rev. 2009. 19(3): p. 385-98.
- Yung, A.R., Phillips, L.J., Yuen, H.P., Francey, S.M., McFarlane, C.A., Hallgren, M., & McGorry, P.D., Psychosis prediction: 12-month follow up of a high-risk ("prodromal") group. Schizophr Res, 2003. 60(1): p. 21-32.
- Yung, A.R., Stanford, C., Cosgrave, E., Killackey, E., Phillips, L., Nelson, B., & McGorry, P.D., Testing the Ultra High Risk (prodromal) criteria for the prediction of psychosis in a clinical sample of young people. Schizophr Res, 2006. 84(1): p. 57-66.
- Schultze-Lutter, F., Subjective symptoms of schizophrenia in research and the clinic: the basic symptom concept. Schizophr Bull, 2009. 35(1): p. 5-8.
- Coid, J.W., Kirkbride, J.B., Barker, D., Cowden, F., Stamps, R., Yang, M., & Jones, P.B., Raised incidence rates of all psychoses among migrant groups: findings from the East London first episode psychosis study. Arch Gen Psychiatry, 2008. 65(11): p. 1250-8.
- Yung, A.R. & McGorry, P.D., The prodromal phase of first-episode psychosis: past and current conceptualizations. Schizophr Bull, 1996. 22(2): p. 353-70.
- Hafner, H., Maurer, K., Trendler, G., an der Heiden, W., Schmidt, M., & Konnecke, R., Schizophrenia and depression: challenging the paradigm of two separate diseases--a controlled study of schizophrenia, depression and healthy controls. Schizophr Res, 2005. 77(1): p. 11-24.
- McGrath, J., Saha, S., Welham, J., El Saadi, O., MacCauley, C., & Chant, D., A systematic review of the incidence of schizophrenia: the distribution of rates and the influence of sex, urbanicity, migrant status and methodology. BMC Med, 2004. 2: p. 13.

- Jablensky, A., McGrath, J., Herrman, H., Castle, D., Gureje, O., Evans, M., ... Harvey, C., Psychotic disorders in urban areas: an overview of the Study on Low Prevalence Disorders. Aust N Z J Psychiatry, 2000. 34(2): p. 221-36.
- Padmavathi, R., Rajkumar, S. & Srinivasan, T.N., Schizophrenic patients who were never treated--a study in an Indian urban community. Psychol Med, 1998. 28(5): p. 1113-7.
- Australian Institute of Health and Welfare, Young Australians: their health and well-being. 2007, Australian Institute of Health and Welfare: Canberra.
- van Os, J., Linscott, R.J., Myin-Germeys, I., Delespaul, P., & Krabbendam, L., A systematic review and meta-analysis of the psychosis continuum: evidence for a psychosis pronenesspersistence-impairment model of psychotic disorder. Psychol Med, 2009. 39(2): p. 179-95.
- McGorry, P.D., Purcell, R., Hickie, I.B., Yung, A.R., Pantelis, C., & Jackson, H.J., Clinical staging: a heuristic model for psychiatry and youth mental health. Med J Aust, 2007. 187(7 Suppl): p. S40-2.
- McGorry, P.D., Hickie, I.B., Yung, A.R., Pantelis, C., & Jackson, H.J., Clinical staging of psychiatric disorders: a heuristic framework for choosing earlier, safer and more effective interventions. Aust N Z J Psychiatry, 2006. 40(8): p. 616-22.
- 80. Asarnow, J.R., Children at risk for schizophrenia: converging lines of evidence. Schizophr Bull, 1988. 14(4): p. 613-31.
- 81. Cornblatt, B. & Obuchowski, M., Update on high risk research 1987-1997. Int Rev Psychiatry, 1997. 9: p. 437-447.
- Mednick, S.A., Parnas, J. & Schulsinger, F., The Copenhagen High-Risk Project, 1962-86. Schizophr Bull, 1987. 13(3): p. 485-95.
- 83. Hodges, A., Byrne, M., Grant, E., & Johnstone, E., People at risk of schizophrenia. Sample characteristics of the first 100 cases in the Edinburgh High-Risk Study. Br J Psychiatry, 1999. 174: p. 547-53.
- Johnstone, E.C., Abukmeil, S.S., Byrne, M., Clafferty, R., Grant, E., Hodges, A., ... Owens, D.G., Edinburgh high risk study-findings after four years: demographic, attainment and psychopathological issues. Schizophr Res, 2000. 46(1): p.1-15.
- Miller, P., Byrne, M., Hodges, A., Lawrie, S.M., Owens, D.G., & Johnstone, E.C., Schizotypal components in people at high risk of developing schizophrenia: early findings from the Edinburgh High-Risk Study. Br J Psychiatry, 2002. 180: p. 179-84.
- Johnstone, E.C., Cosway, R. & Lawrie, S.M., Distinguishing characteristics of subjects with good and poor early outcome in the Edinburgh High-Risk Study. Br J Psychiatry Suppl, 2002. 43: p. 236-20
- Yung, A.R. & McGorry, P.D., The initial prodrome in psychosis: descriptive and qualitative aspects. Aust N Z J Psychiatry, 1996. 30(5): p. 587-99.
- Yung, A.R., McGorry, P.D., McFarlane, C.A., Jackson, H.J., Patton, G.C., & Rakkar, A., Monitoring and care of young people at incipient risk of psychosis. Schizophr Bull, 1996. 22(2): p. 283-303.
- Allen, J.J., Chapman, L.J., Chapman, J.P., Vuchetich, J.P., & Frost, L.A., Prediction of psychoticlike symptoms in hypothetically psychosis-prone college students. J Abnorm Psychol, 1987. 96(2): n. 83-8
- 90. Chapman, L.J. & Chapman, J.P., The search for symptoms predictive of schizophrenia. Schizophr Bull, 1987. 13(3): p. 497-
- 91. Chapman, L.J., Chapman, J.P., Kwapil, T.R., Eckblad, M., & Zinser, M.C., *Putatively psychosis-prone subjects 10 years later.* J Abnorm Psychol, 1994. **103**(2): p. 171-83.
- Klosterkotter, J., Hellmich, M., Steinmeyer, E.M., & Schultze-Lutter, F., Diagnosing schizophrenia in the initial prodromal phase. Arch Gen Psychiatry, 2001. 58(2): p. 158-64.

- Klosterkotter, J., Schultze-Lutter, F., Gross, G., Huber, G., & Steinmeyer, E.M., Early self-experienced neuropsychological deficits and subsequent schizophrenic diseases: an 8-year average follow-up prospective study. Acta Psychiatr Scand, 1997. 95(5): p. 396-404.
- Yung, A.R., Phillips, L.J., McGorry, P.D., McFarlane, C.A., Francey, S., Harrigan, S., ... Jackson, H.J., Prediction of psychosis. A step towards indicated prevention of schizophrenia. Br J Psychiatry Suppl, 1998. 172(33): p. 14-20.
- Yung, A.R., Phillips, L.J., Yuen, H.P., & McGorry, P.D., Risk factors for psychosis in an ultra high-risk group: psychopathology and clinical features. Schizophr Res, 2004. 67(2-3): p. 131-42.
- 96. Gross, G., Huber, G., Klosterkoetter, J., & Linz, M., BSABS: The Bonn Scale for the Assessment of Basic Symptoms. 1987, Heidelberg: Springer.
- 97. Schultze-Lutter, F., Addington, J., Ruhrmann, S., & Klosterkoetter, J., Schizophrenia proneness instrument, adult version (SPI-A). 2007, Rome: Giovanni Fioriti Editore.
- Bell, R.Q., Multiple-risk cohorts and segmenting risk as solutions to the problem of false positives in risk for the major psychoses. Psychiatry, 1992. 55(4): p. 370-81.
- Goldman, H.H., Skodol, A.E. & Lave, T.R., Revising axis V for DSM-IV: a review of measures of social functioning. Am J Psychiatry, 1992. 149(9): p. 1148-56.
- 100. Yung, A.R., Yuen, H.P., McGorry, P.D., Phillips, L.J., Kelly, D., Dell'Olio, M., ... Buckby, J., Mapping the onset of psychosis: the Comprehensive Assessment of At-Risk Mental States. Aust N Z J Psychiatry, 2005. 39(11-12): p. 964-71.
- 101. Miller, T.J., McGlashan, T.H., Rosen, J.L., Somjee, L., Markovich, P.J., Stein, K., & Woods, S.W., Prospective diagnosis of the initial prodrome for schizophrenia based on the Structured Interview for Prodromal Syndromes: preliminary evidence of interrater reliability and predictive validity. Am J Psychiatry, 2002. 159(5): p. 863-5.
- 102. Miller, T.J., McGlashan, T.H., Woods, S.W., Stein, K., Driesen, N., Corcoran, C.M., ... Davidson, L., Symptom assessment in schizophrenic prodromal states. Psychiatric Quarterly, 1999. 70(4): p. 273-87.
- Cornblatt, B.A., Lencz, T., Smith, C.W., Correll, C.U., Auther, A.M., & Nakayama, E., The schizophrenia prodrome revisited: a neurodevelopmental perspective. Schizophr Bull, 2003. 29(4): p. 633-51.
- 104. Cornblatt, B., Lencz, T. & Obuchowski, M., The schizophrenia prodrome: treatment and high-risk perspectives. Schizophr Res, 2002. 54(1-2): p. 177-86.
- 105. Maier, W., Cornblatt, B.A. & Merikangas, K.R., Transition to schizophrenia and related disorders: toward a taxonomy of risk. Schizophr Bull, 2003. 29(4): p. 693-701.
- 106. Olsen, K.A. & Rosenbaum, B., Prospective investigations of the prodromal state of schizophrenia: review of studies. Acta Psychiatr Scand, 2006. 113(4): p. 247-72.
- 107. Hartmann, J.A., Yuen, H.P., McGorry, P.D., Yung, A.R., Lin, A., Wood, S.J., ... Nelson, B., Declining transition rates to psychotic disorder in "ultra-high risk" clients: Investigation of a dilution effect. Schizophr Res, 2016. 170(1): p. 130-136.
- 108. Fusar-Poli, P., Bonoldi, I., Yung, A.R., Borgwardt, S., Kempton, M.J., Valmaggia, L., ... McGuire, P., Predicting psychosis: metaanalysis of transition outcomes in individuals at high clinical risk. Arch Gen Psychiatry, 2012. 69(3): p. 220-229.
- 109. Yung, A.R., Yuen, H.P., Berger, G., Francey, S., Hung, T.C., Nelson, B., ... McGorry, P., Declining transition rate in ultra high risk (prodromal) services: dilution or reduction of risk? Schizophr Bull, 2007. 33(3): p. 673-81.
- McGorry, P.D., The recognition and optimal management of early psychosis: an evidence-based reform. World Psychiatry, 2002. 1(2): p. 76-83.

- Bechdolf, A., Wagner, M., Veith, V., Ruhrmann, S., Pukrop, R., Brockhaus-Dumke, A., ... Klosterkotter, J., Randomized controlled multicentre trial of cognitive behavioural therapy in the early initial prodromal state: effects on social adjustment post treatment. Early Interven Psychiatry, 2007. 1(1): p. 71-78.
- Corcoran, C., Malaspina, D. & Hercher, L., Prodromal interventions for schizophrenia vulnerability: the risks of being "at risk". Schizophr Res, 2005. 73(2-3): p. 173-84.
- Schaffner, K.F. & McGorry, P.D., Preventing severe mental illnesses-new prospects and ethical challenges. Schizophr Res, 2001. 51(1): p. 3-15.
- 114. Yung, A.R., Nelson, B., Thompson, A.D., & Wood, S.J., Should a "Risk Syndrome for Psychosis" be included in the DSMV? Schizophr Res, 2010. 120(1-3): p. 7-15.
- 115. Addington, J., Lambert, T. & Burnett, P., Complete and incomplete recovery from first-episode psychosis, in *The* recognition and management of early psychosis: a preventive approach., Jackson, H.J., & McGorry, P.D., Editors. 2009, Cambridge University Press: Cambridge. p. 201-222.
- Addington, J., Van Mastrigt, S. & Addington, D., Duration of untreated psychosis: impact on 2-year outcome. Psychol Med, 2004. 34(2): p. 277-84.
- 117. Larsen, T.K., Moe, L.C., Vibe-Hansen, L., & Johannessen, J.O., Premorbid functioning versus duration of untreated psychosis in 1 year outcome in first-episode psychosis. Schizophr Res, 2000. 45(1-2): p. 1-9.
- 118. Malla, A.K., Norman, R.M., Manchanda, R., Ahmed, M.R., Scholten, D., Harricharan, R., ... Takhar, J., One year outcome in first episode psychosis: influence of DUP and other predictors. Schizophr Res, 2002. 54(3): p. 231-42.
- 119. Petersen, L., Thorup, A., Oqhlenschlaeger, J., Christensen, T.O., Jeppesen, P., Krarup, G., ... Nordentoft, M., Predictors of remission and recovery in a first-episode schizophrenia spectrum disorder sample: 2-year follow-up of the OPUS trial. Can J Psychiatry, 2008. 53(10): p. 660-70.
- Wunderink, L., Sytema, S., Nienhuis, F.J., & Wiersma, D., Clinical recovery in first-episode psychosis. Schizophr Bull, 2009. 35(2): p. 362-9.
- 121. Geddes, J., Mercer, G., Frith, C.D., MacMillan, F., Owens, D.G., & Johnstone, E.C., Prediction of outcome following a first episode of schizophrenia. A follow-up study of Northwick Park first episode study subjects. Br J Psychiatry, 1994. 165(5): p. 664-8.
- The Scottish Schizphrenia Researh Group., The Scottish First Episode Schizophrenia Study V. One-year follow-up. Br J Psychiatry, 1988. 152: p. 470-6.
- 123. Leung, A. & Chue, P., Sex differences in schizophrenia, a review of the literature. Acta Psychiatr Scand Suppl, 2000. 401: p. 3-38.
- 124. Ram, R., Bromet, E.J., Eaton, W.W., Pato, C., & Schwartz, J.E., The natural course of schizophrenia: a review of first-admission studies. Schizophr Bull, 1992. 18(2): p. 185-207.
- 125. Thorup, A., Petersen, L., Jeppesen, P., Ohlenschlaeger, J., Christensen, T., Krarup, G., ... Nordentoft, M., Gender differences in young adults with first-episode schizophrenia spectrum disorders at baseline in the Danish OPUS study. J Nerv Ment Dis, 2007. 195(5): p. 396-405.
- 126. Bailer, J., Brauer, W. & Rey, E.R., Premorbid adjustment as predictor of outcome in schizophrenia: results of a prospective study. Acta Psychiatr Scand, 1996. 93(5): p. 368-77.
- 127. Ho, B.C., Nopoulos, P., Flaum, M., Arndt, S., & Andreasen, N.C., Two-year outcome in first-episode schizophrenia: predictive value of symptoms for quality of life. Am J Psychiatry, 1998. 155(9): p. 1196-201.
- 128. Malla, A.K., Norman, R.M., McLean, T.S., MacDonald, C., McIntosh, E., Dean-Lashley, F., ... Ahmed, R., Determinants of quality of life in first-episode psychosis. Acta Psychiatr Scand, 2004. 109(1): p. 46-54.

- Tamminga, C.A., Buchanan, R.W. & Gold, J.M., The role of negative symptoms and cognitive dysfunction in schizophrenia outcome. Int Clin Psychopharmacol, 1998. 13 Suppl 3: p. S21-6.
- Johnstone, E.C., Macmillan, J.F., Frith, C.D., Benn, D.K., & Crow, T.J., Further investigation of the predictors of outcome following first schizophrenic episodes. Br J Psychiatry, 1990. 157: p. 182-9.
- Dixon, L., Dual diagnosis of substance abuse in schizophrenia: prevalence and impact on outcomes. Schizophr Res, 1999. 35 Suppl: p. S93-100.
- 132. Linszen, D.H., Dingemans, P.M. & Lenior, M.E., Cannabis abuse and the course of recent-onset schizophrenic disorders. Arch Gen Psychiatry, 1994. 51(4): p. 273-9.
- 133. Wade, D., Harrigan, S., Edwards, J., Burgess, P.M., Whelan, G., & McGorry, P.D., Substance misuse in first-episode psychosis: 15-month prospective follow-up study. Br J Psychiatry, 2006. 189: p. 229-34.
- Ascher-Svanum, H., Zhu, B., Faries, D., Lacro, J.P., & Dolder, C.R., A prospective study of risk factors for nonadherence with antipsychotic medication in the treatment of schizophrenia. J Clin Psychiatry, 2006. 67(7): p. 1114-23.
- 135. Erickson, D.H., Beiser, M. & Iacono, W.G., Social support predicts 5-year outcome in first-episode schizophrenia. J Abnorm Psychol, 1998. 107(4): p. 681-5.
- Bleuler, E., Dementia Praecox or the Group of Schizophrenias, trans.
 J. Zinkin. New York: International Universities Press, 1950: p. 14-15.
- 137. McGlashan, T.H., Is active psychosis neurotoxic? Schizophr Bull, 2006. 32(4): p. 609-13.
- Birchwood, M., Todd, P. & Jackson, C., Early intervention in psychosis. The critical period hypothesis. Br J Psychiatry Suppl, 1998. 172(33): p. 53-9.
- Carpenter, W.T., Jr. & Strauss, J.S., The prediction of outcome in schizophrenia. IV: Eleven-year follow-up of the Washington IPSS cohort. J Nerv Ment Dis, 1991. 179(9): p. 517-25.
- 140. Dube, K.C., Kumar, N. & Dube, S., Long term course and outcome of the Agra cases in the International Pilot Study of Schizophrenia. Acta Psychiatr Scand, 1984. 70(2): p. 170-9.
- 141. McGlashan, T.H., The Chestnut Lodge follow-up study. II. Longterm outcome of schizophrenia and the affective disorders. Arch Gen Psychiatry, 1984. 41(6): p. 586-601.
- 142. Crumlish, N., Whitty, P., Clarke, M., Browne, S., Kamali, M., Gervin, M., ... O'Callaghan, E., Beyond the critical period: longitudinal study of 8-year outcome in first-episode non-affective psychosis. Br J Psychiatry, 2009. 194(1): p. 18-24.
- 143. Keshavan, M.S., Haas, G., Miewald, J., Montrose, D.M., Reddy, R., Schooler, N.R., & Sweeney, J.A., Prolonged untreated illness duration from prodromal onset predicts outcome in first episode psychoses. Schizophr Bull, 2003. 29(4): p. 757-69.
- 144. Edwards, J., Maude, D., McGorry, P.D., Harrigan, S.M., & Cocks, J.T., *Prolonged recovery in first-episode psychosis*. Br J Psychiatry Suppl, 1998. 172(33): p. 107-16.
- 145. Manchanda, R., Norman, R.M., Malla, A.K., Harricharan, R., & Northcott, S., Persistent psychoses in first episode patients. Schizophr Res, 2005. 80(1): p. 113-6.
- 146. Wiersma, D., Nienhuis, F.J., Slooff, C.J., & Giel, R., Natural course of schizophrenic disorders: a 15-year followup of a Dutch incidence cohort. Schizophr Bull, 1998. 24(1): p. 75-85.
- 147. Pantelis, C. & Lambert, T.J., Managing patients with "treatment-resistant" schizophrenia. Med J Aust, 2003. 178 Suppl: p. S62-6.
- 148. Lieberman, J., Jody, D., Geisler, S., Alvir, J., Loebel, A., Szymanski, S., ... Borenstein, M., Time course and biologic correlates of treatment response in first-episode schizophrenia. Arch Gen Psychiatry, 1993. 50(5): p. 369-76.

- 149. Robinson, D., Woerner, M.G., Alvir, J.M., Bilder, R., Goldman, R., Geisler, S., ... Lieberman, J.A., Predictors of relapse following response from a first episode of schizophrenia or schizoaffective disorder. Arch Gen Psychiatry, 1999. 56(3): p. 241-7.
- 150. Robinson, D.G., Woerner, M.G., Delman, H.M., & Kane, J.M., Pharmacological treatments for first-episode schizophrenia. Schizophr Bull, 2005. 31(3): p. 705-22.
- Shepherd, M., Watt, D., Falloon, I., & Smeeton, N., The natural history of schizophrenia: a five-year follow-up study of outcome and prediction in a representative sample of schizophrenics. Psychol Med Monogr Suppl, 1989. 15: p. 1-46.
- 152. Power, P.J., Bell, R.J., Mills, R., Herrman-Doig, T., Davern, M., Henry, L., ... McGorry, P.D., Suicide prevention in first episode psychosis: the development of a randomised controlled trial of cognitive therapy for acutely suicidal patients with early psychosis. Aust N Z J Psychiatry, 2003. 37(4): p. 414-20.
- Siris, S.G., Suicide and schizophrenia. J Psychopharmacol, 2001.
 15(2): p. 127-35.
- 154. Macdonald, E.M., Hayes, R.L. & Baglioni, A.J., Jr., The quantity and quality of the social networks of young people with early psychosis compared with closely matched controls. Schizophr Res, 2000. 46(1): p. 25-30.
- Addington, J., Addington, D., Jones, B., & Ko, T., Family intervention in an early psychosis program. Psychiatr Rehab Skills, 2001. 5(2): p. 272-286.
- Gleeson, J. & McGorry, P.D., Psychological interventions in early psychosis: a treatment handbook. 2004, Chichester: John Wiley & Sons.
- McGorry, P., Psychotherapy of schizophrenia. J Am Acad Psychoanal Dyn Psychiatry, 2004. 32(2): p. 399-401; author reply 401-2.
- 158. Lawrence, S., Health promotion, prevention, early intervention, comorbidity: the contribution of primary care to people with psychosis. 2003, Churchill Memorial Trust Leeds.
- 159. Marder, S.R., Essock, S.M., Miller, A.L., Buchanan, R.W., Casey, D.E., Davis, J.M., ... Shon, S., Physical health monitoring of patients with schizophrenia. Am J Psychiatry, 2004. 161(8): p. 1334-49.
- 160. Penttilä, M., Jääskeläinen, E., Hirvonen, N., Isohanni, M., & Miettunen, J., Duration of untreated psychosis as predictor of long-term outcome in schizophrenia: systematic review and metaanalysis. Br J Psychiatry, 2014. 205(2): p. 88-94.
- Johannessen, J.O., McGlashan, T.H., Larsen, T.K., Horneland, M., Joa, I., Mardal, S., ... Vaglum, P., Early detection strategies for untreated first-episode psychosis. Schizophr Res, 2001. 51(1): p. 39-46.
- 162. Johannessen, J.O., Friis, S., Joa, I., Haahr, U., Larsen, T.K., Melle, I., ... McGlashan, T., First-episode psychosis patients recruited into treatment via early detection teams versus ordinary pathways: course, outcome and health service use during first 2 years. Early Interven Psychiatry, 2007. 1(1): p. 40-48.
- 163. Larsen, T.K., Melle, I., Auestad, B., Friis, S., Haahr, U., Johannessen, J.O., ... McGlashan, T., Early detection of first-episode psychosis: the effect on 1-year outcome. Schizophr Bull, 2006. 32(4): p. 758-64.
- 164. Norman, R.M.G. & Malla, A.K., Pathways to care and reducing treatment delay in early psychosis, in *The recognition and* management of early psychosis: a preventive approach, Jackson, H.J., & McGorry, P.D., Editors. 2009, Cambridge University Press: Cambridge.
- 165. Preda, A., Miller, T.J., Rosen, J.L., Somjee, L., McGlashan, T.H., & Woods, S.W., Treatment histories of patients with a syndrome putatively prodromal to schizophrenia. Psychiatr Serv, 2002. 53(3): p. 342-4.
- 166. Norman, R.M., Malla, A.K., Verdi, M.B., Hassall, L.D., & Fazekas, C., Understanding delay in treatment for first-episode psychosis. Psychol Med, 2004. 34(2): p. 255-66.

- 167. Johannessen, J.O., McGlashan, T., Larsen, T.K., Friis, S., Melle, I., Opjordsmoen, S., ... Rishovd-Rund, B., Mental health literacy, help seeking and access to treatment in early psychosis. Acta Psychiatr Scand, 2002. 106(S413): p. 9.
- 168. Larsen, T.K., McGlashan, T.H., Johannessen, J.O., Friis, S., Guldberg, C., Haahr, U., ... Vaglum, P., Shortened duration of untreated first episode of psychosis: changes in patient characteristics at treatment. Am J Psychiatry, 2001. 158(11): p. 1917-9.
- 169. Malla, A., Norman, R., Scholten, D., Manchanda, R., & McLean, T., A community intervention for early identification of first episode psychosis: impact on duration of untreated psychosis (DUP) and patient characteristics. Soc Psychiatry Psychiatr Epidemiol, 2005. 40(5): p. 337-44.
- 170. Wright, A., Harris, M.G., Wiggers, J.H., Jorm, A.F., Cotton, S.M., Harrigan, S.M., ... McGorry, P.D., Recognition of depression and psychosis by young Australians and their beliefs about treatment. Med J Aust, 2005. 183(1): p. 18-23.
- Chong, S.A., Mythily, S. & Verma, S., Reducing the duration of untreated psychosis and changing help-seeking behaviour in Singapore. Soc Psychiatry Psychiatr Epidemiol, 2005. 40(8): p. 619-21.
- 172. Krstev, H., Carbone, S., Harrigan, S.M., Curry, C., Elkins, K., & McGorry, P.D., Early intervention in first-episode psychosis-the impact of a community development campaign. Soc Psychiatry Psychiatr Epidemiol, 2004. 39(9): p. 711-9.
- 173. Gerson, R., Davidson, L., Booty, A., McGlashan, T., Malespina, D., Pincus, H.A., & Corcoran, C., Families' experience with seeking treatment for recent-onset psychosis. Psychiatr Serv, 2009. 60(6): p. 812-6.
- 174. Bechard-Evans, L., Schmitz, N., Abadi, S., Joober, R., King, S., & Malla, A., Determinants of help-seeking and system related components of delay in the treatment of first-episode psychosis. Schizophr Res, 2007. 96(1-3): p. 206-14.
- 175. Power, P. & McGorry, P.D., Initial assessment of first-episode psychosis, in *The recognition and management of early psychosis:* a preventive approach, McGorry P.D., & Jackson, H.J., Editors. 1999, Cambridge University Press: Cambridge.
- 176. Kulkarni, J. & Power, P., Initial management of first-epidsode psychosis., in *The recognition and management of early psychosis:* a preventive approach., McGorry, P.D., & Jackson, H.J., Editors. 1999, Cambridge University Press: Cambridge.
- 177. Raphael, B., *Psychiatry 'at the coal-face'*. Aust N Z J Psychiatry, 1986. **20**(3): p. 316-32.
- 178. McGorry, P.D., Chanen, A., McCarthy, E., Van Riel, R., McKenzie, D., & Singh, B.S., Posttraumatic stress disorder following recent-onset psychosis. An unrecognized postpsychotic syndrome. J Nerv Ment Dis, 1991. 179(5): p. 253-8.
- 179. David, A., Buchanan, A., Reed, A., & Almeida, O., The assessment of insight in psychosis. Br J Psychiatry, 1992. 161: p. 599-602.
- David, A.S., *Insight and psychosis*. Br J Psychiatry, 1990. 156: p. 798-808.
- Saravanan, B., Jacob, K.S., Johnson, S., Prince, M., Bhugra, D., & David, A.S., Assessing insight in schizophrenia: East meets West. Br J Psychiatry, 2007. 190: p. 243-7.
- 182. Wiffen, B.D., Rabinowitz, J., Lex, A., & David, A.S., Correlates, change and 'state or trait' properties of insight in schizophrenia. Schizophr Res, 2010. 122(1-3): p. 94-103.
- 183. National Collaborating Centre for Mental Health (Great Britain), Psychosis and Schizophrenia in Children and Young People: Recognition and Management (No. 155). 2013, RCPsych Publications: Leicester (UK).
- 184. Spencer, E., Birchwood, M. & McGovern, D., Management of first-episode psychosis. Advances in Psychiatric Treatment, 2001. 7(2): p. 133-140.

- 185. Rufino, A.C., Uchida, R.R., Vilela, J.A., Marques, J.M., Zuardi, A.W., & Del-Ben, C.M., Stability of the diagnosis of first-episode psychosis made in an emergency setting. General Hospital Psychiatry, 2005. 27(3): p. 189-93.
- Freudenreich, O., Schulz, S.C. & Goff, D.C., Initial medical workup of first-episode psychosis: a conceptual review. Early Interven Psychiatry, 2009. 3(1): p. 10-18.
- 187. Lambert, T.J., The medical care of people with psychosis. Med J Aust, 2009. 190(4): p. 171-2.
- 188. Heaton, R.K., Gladsjo, J.A., Palmer, B.W., Kuck, J., Marcotte, T.D., & Jeste, D.V., Stability and course of neuropsychological deficits in schizophrenia. Arch Gen Psychiatry, 2001. 58(1): p. 24-32.
- 189. Kurtz, M.M., Seltzer, J.C., Ferrand, J.L., & Wexler, B.E., Neurocognitive function in schizophrenia at a 10-year follow-up: a preliminary investigation. CNS Spectrums, 2005. 10(4): p. 277-80.
- 190. Hawkins, K.A., Keefe, R.S., Christensen, B.K., Addington, J., Woods, S.W., Callahan, J., ... McGlashan, T.H., Neuropsychological course in the prodrome and first episode of psychosis: findings from the PRIME North America Double Blind Treatment Study. Schizophr Res, 2008. 105(1-3): p. 1-9.
- Eastvold, A.D., Heaton, R.K. & Cadenhead, K.S., Neurocognitive deficits in the (putative) prodrome and first episode of psychosis. Schizophr Res, 2007. 93(1-3): p. 266-77.
- 192. Hawkins, K.A., Addington, J., Keefe, R.S., Christensen, B., Perkins, D.O., Zipurksy, R., ... McGlashan, T.H., Neuropsychological status of subjects at high risk for a first episode of psychosis. Schizophr Res, 2004. 67(2-3): p. 115-22.
- Keefe, R.S., Bilder, R.M., Harvey, P.D., Davis, S.M., Palmer, B.W., Gold, J.M., ... Lieberman, J.A., Baseline neurocognitive deficits in the CATIE schizophrenia trial. Neuropsychopharmacology, 2006. 31(9): p. 2033-46.
- 194. Simon, A.E., Cattapan-Ludewig, K., Zmilacher, S., Arbach, D., Gruber, K., Dvorsky, D.N., ... Umbricht, D., Cognitive functioning in the schizophrenia prodrome. Schizophr Bull, 2007. 33(3): p. 761-71
- 195. Niendam, T.A., Bearden, C.E., Johnson, J.K., McKinley, M., Loewy, R., O'Brien, M., ... Cannon, T.D., Neurocognitive performance and functional disability in the psychosis prodrome. Schizophr Res, 2006. 84(1): p. 100-11.
- 196. Green, M.F., Kern, R.S., Braff, D.L., & Mintz, J., Neurocognitive deficits and functional outcome in schizophrenia: are we measuring the "right stuff"? Schizophr Bull, 2000. 26(1): p. 119-36.
- Joyce, E.M., Hutton, S.B., Mutsatsa, S.H., & Barnes, T.R., Cognitive heterogeneity in first-episode schizophrenia. Br J Psychiatry, 2005. 187: p. 516-22.
- 198. Rodriguez-Jimenez, R., Bagney, A., Martinez-Gras, I., Ponce, G., Sanchez-Morla, E.M., Aragues, M., ... Palomo, T., Executive function in schizophrenia: influence of substance use disorder history. Schizophr Res, 2010. 118(1-3): p. 34-40.
- 199. Couture, S.M., Penn, D.L. & Roberts, D.L., The functional significance of social cognition in schizophrenia: a review. Schizophr Bull, 2006. 32 Suppl 1: p. S44-63.
- 200.Edwards, J., Pattison, P.E., Jackson, H.J., & Wales, R.J., Facial affect and affective prosody recognition in first-episode schizophrenia. Schizophr Res, 2001. 48(2-3): p. 235-53.
- 201. Williams, L.M., Whitford, T.J., Flynn, G., Wong, W., Liddell, B.J., Silverstein, S., ... Gordon, E., General and social cognition in first episode schizophrenia: identification of separable factors and prediction of functional outcome using the IntegNeuro test battery. Schizophr Res, 2008. 99(1-3): p. 182-91.
- 202. Addington, J., Penn, D., Woods, S.W., Addington, D., & Perkins, D.O., Social functioning in individuals at clinical high risk for psychosis. Schizophr Res, 2008. 99(1-3): p. 119-24.

- 203. Chung, Y.S., Kang, D.H., Shin, N.Y., Yoo, S.Y., & Kwon, J.S., *Deficit of theory of mind in individuals at ultra-high-risk for schizophrenia*. Schizophr Res, 2008. **99**(1-3): p. 111-8.
- 204. Pinkham, A.E., Penn, D.L., Perkins, D.O., Graham, K.A., & Siegel, M., Emotion perception and social skill over the course of psychosis: a comparison of individuals "at-risk" for psychosis and individuals with early and chronic schizophrenia spectrum illness. Cogn Neuropsychiatry, 2007. 12(3): p. 198-212.
- 205. Corcoran, C.M., Kimhy, D., Stanford, A., Khan, S., Walsh, J., Thompson, J., ... Malaspina, D., Temporal association of cannabis use with symptoms in individuals at clinical high risk for psychosis. Schizophr Res, 2008. 106(2-3): p. 286-93.
- 206. Hambrecht, M. & Hafner, H., Cannabis, vulnerability, and the onset of schizophrenia: an epidemiological perspective. Aust N Z J Psychiatry, 2000. 34(3): p. 468-75.
- Kristensen, K. & Cadenhead, K.S., Cannabis abuse and risk for psychosis in a prodromal sample. Psychiatry Res, 2007. 151(1-2): p. 151-4.
- 208. Miller, T.J., Zipursky, R.B., Perkins, D., Addington, J., Woods, S.W., Hawkins, K.A., ... McGlashan, T.H., The PRIME North America randomized double-blind clinical trial of olanzapine versus placebo in patients at risk of being prodromally symptomatic for psychosis. II. Baseline characteristics of the "prodromal" sample. Schizophr Res, 2003. 61(1): p. 19-30.
- 209. Phillips, L.J., Curry, C., Yung, A.R., Yuen, H.P., Adlard, S., & McGorry, P.D., Cannabis use is not associated with the development of psychosis in an 'ultra' high-risk group. Aust N Z J Psychiatry, 2002. 36(6): p. 800-6.
- Rosen, J.L., Miller, T.J., D'Andrea, J.T., McGlashan, T.H., & Woods, S.W., Comorbid diagnoses in patients meeting criteria for the schizophrenia prodrome. Schizophr Res, 2006. 85(1-3): p. 124-31.
- Andreasson, S., Allebeck, P., Engstrom, A., & Rydberg, U., Cannabis and schizophrenia. A longitudinal study of Swedish conscripts. Lancet, 1987. 2(8574): p. 1483-6.
- 212. Arseneault, L., Cannon, M., Witton, J., & Murray, R.M., Causal association between cannabis and psychosis: examination of the evidence. Br J Psychiatry, 2004. 184: p. 110-7.
- 213. Degenhardt, L. & Hall, W., Is cannabis use a contributory cause of psychosis? Can J Psychiatry, 2006. 51(9): p. 556-65.
- 214. Caspi, A., Moffitt, T.E., Cannon, M., McClay, J., Murray, R., Harrington, H., ... Craig, I.W., Moderation of the effect of adolescent-onset cannabis use on adult psychosis by a functional polymorphism in the catechol-O-methyltransferase gene: longitudinal evidence of a gene X environment interaction. Biol Psychiatry, 2005. 57(10): p. 1117-27.
- 215. Hambrecht, M. & Hafner, H., Substance abuse and the onset of schizophrenia. Biol Psychiatry, 1996. 40(11): p. 1155-63.
- Lambert, M., Conus, P., Lubman, D.I., Wade, D., Yuen, H., Moritz, S., ... Schimmelmann, B.G., The impact of substance use disorders on clinical outcome in 643 patients with first-episode psychosis. Acta Psychiatr Scand, 2005. 112(2): p. 141-8.
- 217. Sorbara, F., Liraud, F., Assens, F., Abalan, F., & Verdoux, H., Substance use and the course of early psychosis: a 2-year follow-up of first-admitted subjects. Eur Psychiatry, 2003. 18(3): p. 133-6.
- 218. Conus, P., Lambert, M., Cotton, S., Bonsack, C., McGorry, P.D., & Schimmelmann, B.G., Rate and predictors of service disengagement in an epidemiological first-episode psychosis cohort. Schizophr Res, 2010. 118(1-3): p. 256-63.
- 219. Miller, R., Ream, G., McCormack, J., Gunduz-Bruce, H., Sevy, S., & Robinson, D., A prospective study of cannabis use as a risk factor for non-adherence and treatment dropout in first-episode schizophrenia. Schizophr Res, 2009. 113(2-3): p. 138-44.
- 220. Linszen, D. & van Amelsvoort, T., Cannabis and psychosis: an update on course and biological plausible mechanisms. Curr Opin Psychiatry, 2007. 20(2): p. 116-20.

- 221. Verdoux, H., Liraud, F., Gonzales, B., Assens, F., Abalan, F., & van Os, J., Predictors and outcome characteristics associated with suicidal behaviour in early psychosis: a two-year follow-up of first-admitted subjects. Acta Psychiatr Scand, 2001. 103(5): p. 347-54.
- 222. Phillips, L.J., Nelson, B., Yuen, H.P., Francey, S.M., Simmons, M., Stanford, C., ... McGorry, P.D., Randomized controlled trial of interventions for young people at ultra-high risk of psychosis: study design and baseline characteristics. Aust N Z J Psychiatry, 2009. 43(9): p. 818-29.
- 223. Myles-Worsley, M., Weaver, S. & Blailes, F., Comorbid depressive symptoms in the developmental course of adolescent-onset psychosis. Early Interv Psychiatry, 2007. 1(21): p. 183-190.
- 224. Yung, A.R., Buckby, J.A., Cosgrave, E.M., Killackey, E.J., Baker, K., Cotton, S.M., & McGorry, P.D., Association between psychotic experiences and depression in a clinical sample over 6 months. Schizophr Res, 2007. 91(1-3): p. 246-53.
- 225. Cornblatt, B.A., Lencz, T., Smith, C.W., Olsen, R., Auther, A.M., Nakayama, E., ... Correll, C.U., Can antidepressants be used to treat the schizophrenia prodrome? Results of a prospective, naturalistic treatment study of adolescents. J Clin Psychiatry, 2007. 68(4): p. 546-57.
- 226. Svirskis, T., Korkeila, J., Heinimaa, M., Huttunen, J., Ilonen, T., Ristkari, T., ... Salokangas, R.K., Axis-I disorders and vulnerability to psychosis. Schizophr Res, 2005. **75**(2-3): p. 439-46.
- 227. Woods, S.W., Addington, J., Cadenhead, K.S., Cannon, T.D., Cornblatt, B.A., Heinssen, R., ... McGlashan, T.H., Validity of the prodromal risk syndrome for first psychosis: findings from the North American Prodrome Longitudinal Study. Schizophr Bull, 2009. 35(5): p. 894-908.
- 228. Bendall, S., Allott, K., Johnson, T., Jackson, H.J., Killackey, E., Harrigan, S., & McGorry, P.D., Pattern of lifetime Axis I morbidity among a treated sample of first-episode psychosis patients. Psychopathology, 2008. 41(2): p. 90-5.
- 229. Conus, P., Cotton, S., Schimmelmann, B.G., McGorry, P.D., & Lambert, T., The First-Episode Psychosis Outcome Study: premorbid and baseline characteristics of an epidemiological cohort of 661 first-episode psychosis patients. Early Interv Psychiatry, 2007. 1.
- 230. Strakowski, S.M., Keck, P.E., Jr., McElroy, S.L., Lonczak, H.S., & West, S.A., Chronology of comorbid and principal syndromes in first-episode psychosis. Compr Psychiatry, 1995. **36**(2): p. 106-12.
- Strakowski, S.M., Tohen, M., Stoll, A.L., Faedda, G.L., Mayer, P.V., Kolbrener, M.L., & Goodwin, D.C., Comorbidity in psychosis at first hospitalization. Am J Psychiatry, 1993. 150(5): p. 752-7.
- Buckley, P.F., Miller, B.J., Lehrer, D.S., & Castle, D.J., Psychiatric comorbidities and schizophrenia. Schizophr Bull, 2009. 35(2): p. 383-402.
- 233. Farrelly, S., Harris, M.G., Henry, L.P., Purcell, R., Prosser, A., Schwartz, O., ... McGorry, P.D., Prevalence and correlates of comorbidity 8 years after a first psychotic episode. Acta Psychiatr Scand, 2007. 116(1): p. 62-70.
- 234. Sim, K., Chua, T.H., Chan, Y.H., Mahendran, R., & Chong, S.A., Psychiatric comorbidity in first episode schizophrenia: a 2 year, longitudinal outcome study. J Psychiatr Res, 2006. 40(7): p. 656-63.
- 235. Strakowski, S.M., Keck, P.E., Jr., McElroy, S.L., West, S.A., Sax, K.W., Hawkins, J.M., ... Bourne, M.L., Twelve-month outcome after a first hospitalization for affective psychosis. Arch Gen Psychiatry, 1998. 55(1): p. 49-55.
- 236. Tohen, M., Strakowski, S.M., Zarate, C., Jr., Hennen, J., Stoll, A.L., Suppes, T., ... Baldessarini, R.J., The McLean-Harvard firstepisode project: 6-month symptomatic and functional outcome in affective and nonaffective psychosis. Biol Psychiatry, 2000. 48(6): p. 467-76.
- Addington, J., Williams, J., Young, J., & Addington, D., Suicidal behaviour in early psychosis. Acta Psychiatr Scand, 2004. 109(2): p. 116-20.

- 238. Nordentoft, M., Jeppesen, P., Abel, M., Kassow, P., Petersen, L., Thorup, A., ... Jorgensen, P., OPUS study: suicidal behaviour, suicidal ideation and hopelessness among patients with first-episode psychosis. One-year follow-up of a randomised controlled trial. Br J Psychiatry Suppl, 2002. 43: p. s98-106.
- 239. Robinson, J., Cotton, S., Conus, P., Schimmelmann, B.G., McGorry, P., & Lambert, M., Prevalence and predictors of suicide attempt in an incidence cohort of 661 young people with firstepisode psychosis. Aust N Z J Psychiatry, 2009. 43(2): p. 149-57.
- 240. Clarke, M., Whitty, P., Browne, S., Mc Tigue, O., Kinsella, A., Waddington, J.L., ... O'Callaghan, E., Suicidality in first episode psychosis. Schizophr Res, 2006. **86**(1-3): p. 221-5.
- 241. Bertelsen, M., Jeppesen, P., Petersen, L., Thorup, A., Ohlenschlaeger, J., le Quach, P., ... Nordentoft, M., Suicidal behaviour and mortality in first-episode psychosis: the OPUS trial. Br J Psychiatry Suppl, 2007. 51: p. s140-6.
- 242. Harvey, S.B., Dean, K., Morgan, C., Walsh, E., Demjaha, A., Dazzan, P., ... Murray, R.M., Self-harm in first-episode psychosis. Br J Psychiatry, 2008. 192(3): p. 178-84.
- 243. Power, P., Suicide prevention in early psychosis, in Psychological interventions in early psychosis: a treatment handbook, Gleeson, J., & McGorry, P.D., Editors. 2004, John Wiley & Sons: Chichester.
- 244. Adlard, S. & Yung, A., An analysis of health damaging behaviours in young people at high risk of psychosis 1997, Melbourne: Royal Australian and New Zealand College of Psychiatrists.
- 245. Preti, A., Meneghelli, A., Pisano, A., & Cocchi, A., Risk of suicide and suicidal ideation in psychosis: results from an Italian multimodal pilot program on early intervention in psychosis. Schizophr Res, 2009. 113(2-3): p. 145-50.
- 246. Hawton, K., Sutton, L., Haw, C., Sinclair, J., & Deeks, J.J., Schizophrenia and suicide: systematic review of risk factors. Br J Psychiatry, 2005. 187: p. 9-20.
- Mortensen, P.B. & Juel, K., Mortality and causes of death in first admitted schizophrenic patients. Br J Psychiatry, 1993. 163: p. 183-9.
- 248. Westermeyer, J.F., Harrow, M. & Marengo, J.T., Risk for suicide in schizophrenia and other psychotic and nonpsychotic disorders. J Nerv Ment Dis, 1991. 179(5): p. 259-66.
- 249. De Hert, M., McKenzie, K. & Peuskens, J., Risk factors for suicide in young people suffering from schizophrenia: a long-term follow-up study. Schizophr Res, 2001. 47.
- 250. Roy, A., Risk factors for suicide in psychiatric patients. Arch Gen Psychiatry, 1982. **39**(9): p. 1089-95.
- Burgess, P., Pirkis, J., Morton, J., & Croke, E., Lessons from a comprehensive clinical audit of users of psychiatric services who committed suicide. Psychiatr Serv, 2000. 51(12): p. 1555-60.
- 252. Fenton, W.S. & McGlashan, T.H., Natural history of schizophrenia subtypes. II. Positive and negative symptoms and long-term course. Arch Gen Psychiatry, 1991. 48(11): p. 978-86.
- 253. Barraclough, B., Bunch, J., Nelson, B., & Sainsbury, P., A hundred cases of suicide: clinical aspects. Br J Psychiatry, 1974. 125(0): p. 355-73.
- 254. Power, P. & Robinson, J., Suicide prevention in first-episode psychosis, in *The recognition and management of early psychosis:* a preventive approach, Jackson, H.J., & McGorry, P.D., Editors. 2009, Cambridge University Press: Cambridge. p. 257-282.
- Addington, D., Addington, J. & Patten, S., Depression in people with first-episode schizophrenia. Br J Psychiatry Suppl, 1998.
 172(33): p. 90-2.
- Amador, X.F., Friedman, J.H., Kasapis, C., Yale, S.A., Flaum, M., & Gorman, J.M., Suicidal behavior in schizophrenia and its relationship to awareness of illness. Am J Psychiatry, 1996. 153(9): p. 1185-8.

- 257. Birchwood, M., Iqbal, Z., Chadwick, P., & Trower, P., Cognitive approach to depression and suicidal thinking in psychosis. 1. Ontogeny of post-psychotic depression. Br J Psychiatry, 2000. 177: p. 516-21.
- 258. Appleby, L., *Preventing suicides must remain a priority.* BMJ: British Medical Journal, 2001. **323**(7316): p. 808-9.
- 259. Rossau, C.D. & Mortensen, P.B., Risk factors for suicide in patients with schizophrenia: nested case-control study. Br J Psychiatry, 1997. 171: p. 355-9.
- 260. Mullen, P.E., Burgess, P., Wallace, C., Palmer, S., & Ruschena, D., Community care and criminal offending in schizophrenia. Lancet, 2000. 355(9204): p. 614-7.
- 261. Wallace, C., Mullen, P., Burgess, P., Palmer, S., Ruschena, D., & Browne, C., Serious criminal offending and mental disorder. Case linkage study. Br J Psychiatry, 1998. 172: p. 477-84.
- 262. Large, M.M. & Nielssen, O., Violence in first-episode psychosis: a systematic review and meta-analysis. Schizophr Res, 2011. 125(2-3): p. 209-20.
- 263. Large, M. & Nielssen, O., Evidence for a relationship between the duration of untreated psychosis and the proportion of psychotic homicides prior to treatment. Soc Psychiatry Psychiatr Epidemiol, 2008. 43(1): p. 37-44.
- 264. Webster, C., Douglas, K., Eaves, D., & Hart, S., HCR-20 Assessing risk for violence: version II. 1997, Burnaby, BC: Mental Health, Law & Policy Institute, Simon Frazier University.
- 265. Maden, A., Treating violence: a guide to risk management in mental health. 2007, Oxford: Oxford University Press.
- 266. Vogel, M., Spitzer, C., Kuwert, P., Moller, B., Freyberger, H.J., & Grabe, H.J., Association of childhood neglect with adult dissociation in schizophrenic inpatients. Psychopathology, 2009. 42(2): p. 124-30.
- 267. Bechdolf, A., Thompson, A., Nelson, B., Cotton, S., Simmons, M.B., Amminger, G.P., ... Yung, A.R., Experience of trauma and conversion to psychosis in an ultra-high-risk (prodromal) group. Acta Psychiatr Scand, 2010. 121(5): p. 377-84.
- 268. Read, J., van Os, J., Morrison, A.P., & Ross, C.A., Childhood trauma, psychosis and schizophrenia: a literature review with theoretical and clinical implications. Acta Psychiatr Scand, 2005. 112(5): p. 330-50.
- 269. Conus, P., Cotton, S., Schimmelmann, B.G., McGorry, P.D., & Lambert, M., Pretreatment and Outcome Correlates of Sexual and Physical Trauma in an Epidemiological Cohort of First-Episode Psychosis Patients. Schizophr Bull, 2009.
- 270. Ucok, A. & Bikmaz, S., The effects of childhood trauma in patients with first-episode schizophrenia. Acta Psychiatr Scand, 2007. 116(5): p. 371-7.
- 271. Bebbington, P.E., Bhugra, D., Brugha, T., Singleton, N., Farrell, M., Jenkins, R., ... Meltzer, H., Psychosis, victimisation and childhood disadvantage: evidence from the second British National Survey of Psychiatric Morbidity. Br J Psychiatry, 2004. 185: p. 220-6.
- 272. Maniglio, R., Severe mental illness and criminal victimization: a systematic review. Acta Psychiatr Scand, 2009. **119**(3): p. 180-91.
- 273. Walsh, E., Moran, P., Scott, C., McKenzie, K., Burns, T., Creed, F., ... Fahy, T., Prevalence of violent victimisation in severe mental illness. Br J Psychiatry, 2003. 183: p. 233-8.
- 274. White, P., Chant, D. & Whiteford, H., A comparison of Australian men with psychotic disorders remanded for criminal offences and a community group of psychotic men who have not offended. Aust N Z J Psychiatry, 2006. 40(3): p. 260-5.
- 275. Hiroeh, U., Appleby, L., Mortensen, P.B., & Dunn, G., Death by homicide, suicide, and other unnatural causes in people with mental illness: a population-based study. Lancet, 2001. 358(9299): p. 2110-2.

- 276. Goodman, L.A., Dutton, M.A. & Harris, M., Episodically homeless women with serious mental illness: prevalence of physical and sexual assault. Am J Orthopsychiatry, 1995. 65(4): p. 468-78.
- 277. Goodman, L.A., Rosenberg, S.D., Mueser, K.T., & Drake, R.E., Physical and sexual assault history in women with serious mental illness: prevalence, correlates, treatment, and future research directions. Schizophr Bull, 1997. 23(4): p. 685-96.
- 278. Mueser, K.T., Goodman, L.B., Trumbetta, S.L., Rosenberg, S.D., Osher, C., Vidaver, R., ... Foy, D.W., *Trauma and posttraumatic stress disorder in severe mental illness*. J Consult Clin Psychol, 1998. 66(3): p. 493-9.
- 279. Thompson, A., Nelson, B., McNab, C., Simmons, M., Leicester, S., McGorry, P.D., ... Yung, A.R., Psychotic symptoms with sexual content in the "ultra high risk" for psychosis population: frequency and association with sexual trauma. Psychiatry Res, 2010. 177(1-2): p. 84-91.
- 280. Thomas, C. & Bartlett, A., The extent and effects of violence among psychiatric inpatients. Psychiatr Bull, 1995. 19: p. 600-604.
- Jones, D.R., Macias, C., Barreira, P.J., Fisher, W.H., Hargreaves, W.A., & Harding, C.M., Prevalence, severity, and co-occurrence of chronic physical health problems of persons with serious mental illness. Psychiatr Serv, 2004. 55(11): p. 1250-7.
- 282. Robinson, D.G., Woerner, M.G., Alvir, J.M., Bilder, R.M., Hinrichsen, G.A., & Lieberman, J.A., Predictors of medication discontinuation by patients with first-episode schizophrenia and schizoaffective disorder. Schizophr Res, 2002. 57(2-3): p. 209-19.
- 283. Addington, D., Best practices: improving quality of care for patients with first-episode psychosis. Psychiatr Serv, 2009. **60**(9): p. 1164-6.
- 284. Lacro, J.P., Dunn, L.B., Dolder, C.R., Leckband, S.G., & Jeste, D.V., Prevalence of and risk factors for medication nonadherence in patients with schizophrenia: a comprehensive review of recent literature. J Clin Psychiatry, 2002. 63(10): p. 892-909.
- 285. Schimmelmann, B.G., Conus, P., Schacht, M., McGorry, P., & Lambert, M., Predictors of service disengagement in first-admitted adolescents with psychosis. J Am Acad Child Adolesc Psychiatry, 2006. 45(8): p. 990-9.
- 286. Day, J.C., Bentall, R.P., Roberts, C., Randall, F., Rogers, A., Cattell, D., ... Power, C., Attitudes toward antipsychotic medication: the impact of clinical variables and relationships with health professionals. Arch Gen Psychiatry, 2005. 62(7): p. 717-24.
- 287. Mental Health Consumer Outcomes Taskforce., Mental health statement of rights and responsibilities. 2012, Commonwealth Department of Health and Ageing: Canberra.
- 288. Falloon, I.R., Coverdale, J.H., Laidlaw, T.M., Merry, S., Kydd, R.R., & Morosini, P., Early intervention for schizophrenic disorders. Implementing optimal treatment strategies in routine clinical services. OTP Collaborative Group. Br J Psychiatry Suppl, 1998. 172(33): p. 33-8.
- 289. van der Gaag, M., Smit, F., Bechdolf, A., French, P., Linszen, D.H., Yung, A.R., ... Cuijpers, P., Preventing a first episode of psychosis: meta-analysis of randomized controlled prevention trials of 12 month and longer-term follow-ups. Schizophr Res, 2013. 149(1-3): p. 56-62.
- 290. Addington, J., Francey, S. & Morrison, A.P., Working with people at high risk of developing psychosis: A treatment handbook. 2006: John Wiley & Sons.
- Beck, A.T., Rush, A.J., Shaw, B.F., & Emery, G., Cognitive therapy of depression: a treatment manual. 1978, Philadelphia: Centre for Cognitive Therapy.
- 292. Ellis, A. & Grieger, R., *RET: Handbook of rational emotive therapy*. 1977, New York: Springer.

- 293. Morrison, A.P., French, P., Parker, S., Roberts, M., Stevens, H., Bentall, R.P., & Lewis, S.W., Three-year follow-up of a randomized controlled trial of cognitive therapy for the prevention of psychosis in people at ultrahigh risk. Schizophr Bull, 2007. 33(3): p. 682-687.
- 294. French, P. & Morrison, A.P., Early detection and cognitive therapy for people at high risk of developing psychosis: a treatment approach. 2004, London: John Wiley & Sons.
- 295. van der Gaag, M., Nieman, D.H., Rietdijk, J., Dragt, S., Ising, H.K., Klaassen, R.M., ... Linszen, D.H., Cognitive behavioral therapy for subjects at ultrahigh risk for developing psychosis: a randomized controlled clinical trial. Schizophr Bull, 2012. 38(6): p. 1180-8.
- 296. Bechdolf, A., Wagner, M., Ruhrmann, S., Harrigan, S., Putzfeld, V., Pukrop, R., ... Klosterkötter, J., Preventing progression to firstepisode psychosis in early initial prodromal states. Br J Psychiatry, 2012. 200(1): p. 22-9.
- 297. Addington, J., Epstein, I., Liu, L., French, P., Boydell, K.M., & Zipursky, R.B., A randomized controlled trial of cognitive behavioral therapy for individuals at clinical high risk of psychosis. Schizophr Res. 2011. 125(1): p. 54-61.
- 298. Yung, A.R., Phillips, L.J., Nelson, B., Francey, S.M., PanYuen, H., Simmons, M.B., ... McGorry, P.D., Randomized controlled trial of interventions for young people at ultra high risk for psychosis: 6-month analysis. J Clin Psychiatry, 2011. 72(4): p. 430-40.
- 299. McGorry, P.D., Nelson, B., Phillips, L.J., Yuen, H.P., Francey, S.M., Thampi, A., ... Yung, A.R., Randomized controlled trial of interventions for young people at ultra-high risk of psychosis: twelve-month outcome. J Clin Psychiatry, 2013. 74(4): p. 349-56.
- 300. Müller, H., Laier, S. & Bechdolf, A., Evidence-based psychotherapy for the prevention and treatment of first-episode psychosis. Eur Arch Psychiatry Clin Neurosci, 2014. 264 Suppl 1: p. S17-25.
- Okuzawa, N., Kline, E., Fuertes, J., Negi, S., Reeves, G., Himelhoch, S., & Schiffman, J., Psychotherapy for adolescents and young adults at high risk for psychosis: a systematic review. Early Interv Psychiatry, 2014. 8(4): p. 307-22.
- 302. Hutton, P. & Taylor, P.J., Cognitive behavioural therapy for psychosis prevention: a systematic review and meta-analysis. Psychol Med, 2014. 44(3): p. 449-68.
- 303. Phillips, L.J., McGorry, P.D., Yuen, H.P., Ward, J., Donovan, K., Kelly, D., ... Yung, A.R., Medium term follow-up of a randomized controlled trial of interventions for young people at ultra high risk of psychosis. Schizophr Res, 2007. **96**(1-3): p. 25-33.
- 304. Woods, S.W., Breier, A., Zipurksy, R., Perkins, D., Addington, J., Miller, T., ... McGlashan, T., Randomized trial of olanzapine versus placebo in the symptomatic acute treatment of the schizophrenic prodrome. Biol Psychiatry, 2002. 53: p. 453-464.
- 305. McGlashan, T.H., Zipursky, R.B., Perkins, D., Addington, J., Miller, T., Woods, S.W., ... Breier, A., Randomized, doubleblind trial of olanzapine versus placebo in patients prodromally symptomatic for psychosis. Am J Psychiatry, 2006. 163(5): p. 790-9.
- 306. Fusar-Poli, P., Valmaggia, L. & McGuire, P., Can antidepressants prevent psychosis? Lancet, 2007. 370(9601): p. 1746-8.
- 307. Amminger, G.P., Schafer, M.R., Papageorgiou, K., Klier, C.M., Cotton, S.M., Harrigan, S.M., ... Berger, G.E., Long-chain omega-3 fatty acids for indicated prevention of psychotic disorders: a randomized, placebo-controlled trial. Arch Gen Psychiatry, 2010. 67(2): p. 146-54.
- 308. Amminger, G.P., Schafer, M.R., Schlogelhofer, M., Klier, C.M., & McGorry, P.D., Longer-term outcome in the prevention of psychotic disorders by the Vienna omega-3 study. Nat Commun, 2015. 6: p. 7934.
- 309. Kruszewski, S.P. & Paczynski, R.P., Atypical antipsychotic agents for the schizophrenia prodrome: not a clear first choice. Int J Risk Safety Med, 2008. **20**: p. 37-44.

- McGorry, P.D., Edwards, J., Mihalopoulos, C., Harrigan, S.M., & Jackson, H.J., EPPIC: an evolving system of early detection and optimal management. Schizophr Bull, 1996. 22(2): p. 305-26.
- Nordentoft, M., Thorup, A., Petersen, L., Ohlenschlaeger, J., Melau, M., Christensen, T.O., ... Jeppesen, P., Transition rates from schizotypal disorder to psychotic disorder for first-contact patients included in the OPUS trial. A randomized clinical trial of integrated treatment and standard treatment. Schizophr Res, 2006. 83(1): p. 29-40.
- Correll, C.U., Sheridan, E.M. & DelBello, M.P., Antipsychotic and mood stabilizer efficacy and tolerability in pediatric and adult patients with bipolar I mania: a comparative analysis of acute, randomized, placebo-controlled trials. Bipolar Disorders, 2010. 12(2): p. 116-141.
- Almandil, N.B. & Wong, I.C., Review on the current use of antipsychotic drugs in children and adolescents. Arch Dis Child Educ Pract Ed, 2011. 96(5): p. 192-196.
- 314. Potkin, S.G., Cohen, M. & Panagides, J., Efficacy and tolerability of asenapine in acute schizophrenia: a placebo- and risperidone-controlled trial. J Clin Psychiatry, 2007. **68**(10): p. 1492-500.
- 315. Kane, J.M., Cohen, M., Zhao, J., Alphs, L., & Panagides, J., Efficacy and safety of asenapine in a placebo- and haloperidolcontrolled trial in patients with acute exacerbation of schizophrenia. J Clin Psychopharmacol, 2010. 30(2): p. 106-15.
- Nakamura, M., Ogasa, M., Guarino, J., Phillips, D., Severs, J., Cucchiaro, J., & Loebel, A., Lurasidone in the treatment of acute schizophrenia: a double-blind, placebo-controlled trial. J Clin Psychiatry, 2009. 70(6): p. 829-36.
- Ogasa, M., Kimura, T., Nakamura, M., & Guarino, J., Lurasidone in the treatment of schizophrenia: a 6-week, placebo-controlled study. Psychopharmacology (Berl), 2013. 225(3): p. 519-30.
- Leucht, S., Cipriani, A., Spineli, L., Mavridis, D., Orey, D., Richter, F., ... Davis, J.M., Comparative efficacy and tolerability of 15 antipsychotic drugs in schizophrenia: a multiple-treatments metaanalysis. Lancet, 2013. 382(9896): p. 951-62.
- 319. Fleischhacker, W.W., Siu, C.O., Bodén, R., Pappadopulos, E., Karayal, O.N., Kahn, R.S., & Group, E.S., Metabolic risk factors in first-episode schizophrenia: baseline prevalence and course analysed from the European First-Episode Schizophrenia Trial. Int J Neuropsychopharmacol, 2013. 16(5): p. 987-995.
- 320. Patel, J.K., Buckley, P.F., Woolson, S., Hamer, R.M., McEvoy, J.P., Perkins, D.O., & Lieberman, J.A., Metabolic profiles of secondgeneration antipsychotics in early psychosis: findings from the CAFE study. Schizophr Res, 2009. 111(1): p. 9-16.
- 321. Pérez-Iglesias, R., Martínez-García, O., Pardo-Garcia, G., Amado, J.A., Garcia-Unzueta, M.T., Tabares-Seisdedos, R., & Crespo-Facorro, B., Course of weight gain and metabolic abnormalities in first treated episode of psychosis: the first year is a critical period for development of cardiovascular risk factors. Int J Neuropsychopharmacol, 2014. 17(1): p. 41-51.
- 322. Vidarsdottir, S., de Leeuw van Weenen, J.E., Frolich, M., Roelfsema, F., Romijn, J.A., & Pijl, H., Effects of olanzapine and haloperidol on the metabolic status of healthy men. J Clin Endocrinol Metab, 2010. **95**(1): p. 118-25.
- 323. Albaugh, V.L., Singareddy, R., Mauger, D., & Lynch, C.J., A double blind, placebo-controlled, randomized crossover study of the acute metabolic effects of olanzapine in healthy volunteers. PLoS One, 2011. 6(8): p. e22662.
- 324. Teff, K.L., Rickels, M.R., Grudziak, J., Fuller, C., Nguyen, H.-L., & Rickels, K., Antipsychotic-induced insulin resistance and postprandial hormonal dysregulation independent of weight gain or psychiatric disease. Diabetes, 2013. 62(9): p. 3232-3240.
- 325. Hahn, M.K., Wolever, T.M., Arenovich, T., Teo, C., Giacca, A., Powell, V., ... Remington, G.J., Acute effects of single-dose olanzapine on metabolic, endocrine, and inflammatory markers in healthy controls. J Clin Psychopharmacol, 2013. 33(6): p. 740-6.

- 326. Fountaine, R.J., Taylor, A.E., Mancuso, J.P., Greenway, F.L., Byerley, L.O., Smith, S.R., ... Fryburg, D.A., Increased food intake and energy expenditure following administration of olanzapine to healthy men. Obesity (Silver Spring), 2010. 18(8): p. 1646-51.
- 327. Correll, C.U., Antipsychotic use in children and adolescents: minimizing adverse effects to maximize outcomes. Focus, 2008.
- 328. Kumar, A., Datta, S.S., Wright, S.D., Furtado, V.A., & Russell, P.S., Atypical antipsychotics for psychosis in adolescents. Cochr Database Syst Rev, 2013. 10: p. CD009582.
- 329. Boter, H., Peuskens, J., Libiger, J., Fleischhacker, W.W., Davidson, M., Galderisi, S., ... group, E.s., Effectiveness of antipsychotics in first-episode schizophrenia and schizophreniform disorder on response and remission: an open randomized clinical trial (EUFEST). Schizophr Res, 2009. 115(2-3): p. 97-103.
- 330. De Hert, M., Dobbelaere, M., Sheridan, E., Cohen, D., & Correll, C., Metabolic and endocrine adverse effects of second-generation antipsychotics in children and adolescents: a systematic review of randomized, placebo controlled trials and guidelines for clinical practice. Eur Psychiatry, 2011. 26(3): p. 144-158.
- 331. Almandil, N.B., Liu, Y., Murray, M.L., Besag, F.M., Aitchison, K.J., & Wong, I.C., Weight gain and other metabolic adverse effects associated with atypical antipsychotic treatment of children and adolescents: a systematic review and meta-analysis. Pediatric Drugs, 2013. 15(2): p. 139-150.
- 332. Richmond, J.S., Berlin, J.S., Fishkind, A.B., Holloman, G.H., Zeller, S.L., Wilson, M.P., ... Ng, A.T., Verbal de-escalation of the agitated patient: consensus statement of the American Association for Emergency Psychiatry Project BETA De-escalation Workgroup. Western J Emergency Med, 2012. 13(1).
- Humble, F. & Berk, M., Pharmacological management of aggression and violence. Hum Psychopharmacol, 2003. 18(6): p. 423-36.
- 334. Olver, J., Love, M., Daniel, J., Norman, T., & Nicholls, D., The impact of a changed environment on arousal levels of patients in a secure extended rehabilitation facility. Australasian Psychiatry, 2009. 17(3): p. 207-211.
- Wilson, M.P., Pepper, D., Currier, G.W., Holloman, G.H., & Feifel, D., The psychopharmacology of agitation: consensus statement of the American Association for Emergency Psychiatry Project BETA Psychopharmacology Workgroup. Western J Emergency Med, 2012. 13(1).
- 336. National Institute for Clinical Excellence, Violence: The Shortterm Management of Disturbed/violent Behaviour in In-patient Psychiatric Settings and Emergency Departments. 2005: National Institute for Clinical Excellence.
- 337. Gillies, D., Sampson, S., Beck, A., & Rathbone, J., *Benzodiazepines* for psychosis-induced aggression or agitation. Cochr Database Syst Rev, 2013. 9: p. D003079.
- 338. Schleifer, J.J., Management of acute agitation in psychosis: an evidence-based approach in the USA. Advances in Psychiatric Treatment, 2011. 17(2): p. 91-100.
- 339. Walther, S., Moggi, F., Horn, H., Moskvitin, K., Abderhalden, C., Maier, N., ... Müller, T.J., Rapid tranquilization of severely agitated patients with schizophrenia spectrum disorders: A naturalistic, rater-blinded, randomized, controlled study with oral haloperidol, risperidone, and olanzapine. J Clin Psychopharmacol, 2014. 34(1): p. 124-128
- 340. Bosanac, P., Hollander, Y. & Castle, D., The comparative efficacy of intramuscular antipsychotics for the management of acute agitation. Australasian Psychiatry, 2013. 21(6): p. 554-62.
- Lambert, M., Initial assessment and initial pharmacological treatment in the acute phase. The Recognition and Management of Early Psychosis: A Preventive Approach, 2009: p. 177.
- 342. National Collaborating Centre for Mental Health (Great Britain), Psychosis and Schizophrenia in Children and Young People: Recognition and Management (No. 155). 2013: RCPsych Publications.

- 343. Early Psychosis Guidelines Writing Group, Australian Clinical Guidelines for Early Psychosis. 2010: Orygen Youth Health.
- 344. Lochmann van Bennekom, M.W., Gijsman, H.J. & Zitman, F.G., Antipsychotic polypharmacy in psychotic disorders: a critical review of neurobiology, efficacy, tolerability and cost effectiveness. J Psychopharmacol, 2013. 27(4): p. 327-36.
- 345. National Institute for Health and Care Excellence, *Psychosis and schizophrenia in adults: prevention and management.* NICE clinical guideline 178. 2014.
- 346. Royal Australian and New Zealand College of Psychiatrists Clinical Practice Guidelines Team for the Treatment of Schizophrenia and Related Disorders, Royal Australian and New Zealand College of Psychiatrists clinical practice guidelines for the treatment of schizophrenia and related disorders. Aust N Z J Psychiatry, 2005. 39(1-2): p. 1-30.
- 347. Timlin, U., Hakko, H., Heino, R., & Kyngas, H., A systematic narrative review of the literature: adherence to pharmacological and nonpharmacological treatments among adolescents with mental disorders. J Clin Nurs. 2014.
- 348. Coldham, E.L., Addington, J. & Addington, D., Medication adherence of individuals with a first episode of psychosis. Acta Psychiatr Scand, 2002. 106(4): p. 286-90.
- 349. Rabinovitch, M., Bechard-Evans, L., Schmitz, N., Joober, R., & Malla, A., Early predictors of nonadherence to antipsychotic therapy in first-episode psychosis. Can J Psychiatry, 2009. 54(1): p. 28-35.
- 350. Hill, M., Crumlish, N., Whitty, P., Clarke, M., Browne, S., Kamali, M., ... O'Callaghan, E., Nonadherence to medication four years after a first episode of psychosis and associated risk factors. Psychiatr Serv, 2010. 61(2): p. 189-92.
- Montreuil, T.C., Cassidy, C.M., Rabinovitch, M., Pawliuk, N., Schmitz, N., Joober, R., & Malla, A.K., Case manager- and patient-rated alliance as a predictor of medication adherence in first-episode psychosis. J Clin Psychopharmacol, 2012. 32(4): p. 465-9.
- 352. Dibonaventura, M., Gabriel, S., Dupclay, L., Gupta, S., & Kim, E., A patient perspective of the impact of medication side effects on adherence: results of a cross-sectional nationwide survey of patients with schizophrenia. BMC Psychiatry, 2012. 12: p. 20.
- 353. Barkhof, E., Meijer, C.J., de Sonneville, L.M., Linszen, D.H., & de Haan, L., Interventions to improve adherence to antipsychotic medication in patients with schizophrenia--a review of the past decade. Eur Psychiatry, 2012. 27(1): p. 9-18.
- 354. Prikryl, R., Prikrylova Kucerova, H., Vrzalova, M., & Ceskova, E., Role of long-acting injectable second-generation antipsychotics in the treatment of first-episode schizophrenia: a clinical perspective. Schizophr Res Treatment, 2012. 2012: p. 764769.
- 355. Heres, S., Schmitz, F.S., Leucht, S., & Pajonk, F.G., *The attitude of patients towards antipsychotic depot treatment*. Int Clin Psychopharmacol, 2007. **22**(5): p. 275-82.
- 356. Lambert, T.J., Practical management of schizophrenia: the role of long-acting Antipsychotics. Int Clin Psychopharmacol, 2013.
- 357. Day, J.C., Wood, G., Dewey, M., & Bentall, R.P., A self-rating scale for measuring neuroleptic side-effects. Validation in a group of schizophrenic patients. Br J Psychiatry, 1995. 166(5): p. 650-653.
- 358. Hartley, S., Barrowclough, C. & Haddock, G., Anxiety and depression in psychosis: a systematic review of associations with positive psychotic symptoms. Acta Psychiatr Scand, 2013. 128(5): n. 327-46
- 359. Altamura, A.C., Serati, M., Albano, A., Paoli, R.A., Glick, I.D., & Dell'Osso, B., An epidemiologic and clinical overview of medical and psychopathological comorbidities in major psychoses. Eur Arch Psychiatry Clin Neurosci, 2011. 261(7): p. 489-508.

- 360. Lambert, M., Schimmelmann, B.G., Naber, D., Schacht, A., Karow, A., Wagner, T., & Czekalla, J., Prediction of remission as a combination of symptomatic and functional remission and adequate subjective well-being in 2960 patients with schizophrenia. J Clin Psychiatry, 2006. 67(11): p. 1690-7.
- Lambert, T.J., Switching antipsychotic therapy: what to expect and clinical strategies for improving therapeutic outcomes. J Clin Psychiatry, 2007. 68 Suppl 6: p. 10-3.
- 362. Remington, G., Rational pharmacotherapy in early psychosis. Br J Psychiatry Suppl, 2005. 48: p. s77-84.
- 363. Emsley, R., Oosthuizen, P.P., Kidd, M., Koen, L., Niehaus, D.J., & Turner, H.J., Remission in first-episode psychosis: predictor variables and symptom improvement patterns. J Clin Psychiatry, 2006. 67(11): p. 1707-12.
- 364. Lambert, M., Conus, P., Schimmelmann, B.G., Eide, P., Ward, J., Yuen, H., ... McGorry, P.D., Comparison of olanzapine and risperidone in 367 first-episode patients with non-affective or affective psychosis: results of an open retrospective medical record study. Pharmacopsychiatry, 2005. 38(5): p. 206-13.
- 365. Malla, A., Norman, R., Schmitz, N., Manchanda, R., Bechard-Evans, L., Takhar, J., & Haricharan, R., Predictors of rate and time to remission in first-episode psychosis: a two-year outcome study. Psychol Med, 2006. 36(5): p. 649-58.
- 366. Flyckt, L., Mattsson, M., Edman, G., Carlsson, R., & Cullberg, J., Predicting 5-year outcome in first-episode psychosis: construction of a prognostic rating scale. J Clin Psychiatry, 2006. 67(6): p. 916-24.
- 367. Sanofi-Aventis Australia Pty Ltd, Product information: Solian (Amisulpride) tablets and solution. 2013.
- 368. Bristol-Myers Squibb Australia Pty Ltd, Product information for Abilify (Aripiprazole) tablets and orally disintegrating tablets. 2013.
- 369. Eli Lilly Australia Pty Limited, Zyprexa (Olanzapine). 2012.
- 370. Pfizer Australia Pty Ltd, Product Information: Zeldox (Ziprasidone hydrochloride). 2013.
- Novartis Pharmaceuticals Australia Pty Ltd, Clozaril (Clozapine).
 2014.
- 372. Janssen-Cilag Pty Ltd, Risperdal, Risperdal Quicklet: Product information. 2013.
- AstraZeneca Pty Ltd, Seroquel (quetiapine fumarate): Product information. 2013.
- 374. Almandil, N.B. & Wong, I.C., Review on the current use of antipsychotic drugs in children and adolescents. Arch Dis Child Educ Pract Ed, 2011. **96**(5): p. 192-6.
- 375. Correll, C.U., Sheridan, E.M. & DelBello, M.P., Antipsychotic and mood stabilizer efficacy and tolerability in pediatric and adult patients with bipolar I mania: a comparative analysis of acute, randomized, placebo-controlled trials. Bipolar Disorders, 2010. 12(2): p. 116-41.
- 376. Almandil, N.B., Liu, Y., Murray, M.L., Besag, F.M., Aitchison, K.J., & Wong, I.C., Weight gain and other metabolic adverse effects associated with atypical antipsychotic treatment of children and adolescents: a systematic review and meta-analysis. Paediatr Drugs, 2013. 15(2): p. 139-50.
- 377. Aspen Pharmacare Australia Pty Ltd, Product information: Lamictal dispersible/chewable tablets, Lamictal tablets. 2013.
- Isacsson, G. & Rich, C.L., Antidepressant drugs and the risk of suicide in children and adolescents. Paediatr Drugs, 2014. 16(2): p. 115-22.
- Galbally, M., Roberts, M. & Buist, A., Mood stabilizers in pregnancy: a systematic review. Aust N Z J Psychiatry, 2010. 44(11): p. 967-77.
- 380. Miller, L.J. & Finnerty, M., Sexuality, pregnancy, and childrearing among women with schizophrenia-spectrum disorders. Psychiatr Serv, 1996. 47(5): p. 502-6.

- 381. Miller, L.J., Sexuality, reproduction, and family planning in women with schizophrenia. Schizophr Bull, 1997. **23**(4): p. 623-35.
- 382. Sanofi-Aventis Australia Pty Ltd, *Product information: Epilim.* 2014.
- 383. Galbally, M., Snellen, M., Walker, S., & Permezel, M., Management of antipsychotic and mood stabilizer medication in pregnancy: recommendations for antenatal care. Aust N Z J Psychiatry, 2010. 44(2): p. 99-108.
- 384. Sachs, H.C., The transfer of drugs and therapeutics into human breast milk: an update on selected topics. Pediatrics, 2013. 132(3): p. e796-809.
- 385. Genung, V., Psychopharmacology column: a review of psychotropic medication lactation risks for infants during breastfeeding. J Child Adolesc Psychiatr Nurs, 2013. 26(3): p. 214-9.
- 386. Chadwick, P., Birchwood, M. & Trower, P., Cognitive therapy for delusions, voices and paranoia. 1996, Chichester: John Wiley & Sons.
- Fowler, D., Garety, P. & Kuipers, E., Cognitive behaviour therapy for psychosis: theory and practice. 1995, Chichester: John Wiley & Sons.
- 388. Farhall, J., Greenwood, K.M. & Jackson, H.J., Coping with hallucinated voices in schizophrenia: a review of self-initiated strategies and therapeutic interventions. Clin Psychol Rev, 2007. 27(4): p. 476-93.
- 389. Hughes, A., Macneil, C., Francey, S., Fraser, S., Hughes, F., & Purcell, R., *Psychological intervention: why, how and when to use in early psychosis.* 2015, Melbourne: Orygen, The National Centre of Excellence in Youth Mental Health.
- 390. Haddock, G., Tarrier, N., Morrison, A.P., Hopkins, R., Drake, R., & Lewis, S., A pilot study evaluating the effectiveness of individual inpatient cognitive-behavioural therapy in early psychosis. Soc Psychiatry Psychiatr Epidemiol, 1999. 34(5): p. 254-8.
- 391. Lewis, S., Tarrier, N., Haddock, G., Bentall, R., Kinderman, P., Kingdon, D., ... Dunn, G., Randomised controlled trial of cognitive-behavioural therapy in early schizophrenia: acute-phase outcomes. Br J Psychiatry Suppl, 2002. 43: p. s91-7.
- 392. Jackson, H.J., McGorry, P.D., Killackey, E., Bendall, S., Allott, K., Dudgeon, P., ... Harrigan, S., Acute-phase and 1-year follow-up results of a randomized controlled trial of CBT versus Befriending for first-episode psychosis: the ACE project. Psychol Med, 2008. 38(5): p. 725-35.
- 393. Haddock, G. & Lewis, S., Psychological interventions in early psychosis. Schizophr Bull, 2005. 31(3): p. 697-704.
- 394. Tarrier, N., Lewis, S., Haddock, G., Bentall, R., Drake, R., Kinderman, P., ... Dunn, G., Cognitive-behavioural therapy in first-episode and early schizophrenia. 18-month follow-up of a randomised controlled trial. Br J Psychiatry, 2004. 184: p. 231-9.
- 395. Bendall, S., Killackey, E., Marois, M.J., & Jackson, H.J., Active Cognitive therapy for Early psychosis (ACE) manual. 2005, Melbourne: Orygen Research Centre.
- 396. van Os, J., Burns, T., Cavallaro, R., Leucht, S., Peuskens, J., Helldin, L., ... Kane, J.M., Standardized remission criteria in schizophrenia. Acta Psychiatr Scand, 2006. 113(2): p. 91-5.
- 397. Warner, R., Recovery from schizophrenia and the recovery model. Curr Opin Psychiatry, 2009. **22**(4): p. 374-80.
- 398. Grunze, H., Vieta, E., Goodwin, G.M, Bowden, C., Licht, R.W., Moller, H.-J., & Kasper, S. The World Federation of Societies of Biological Psychiatry (WFSBP) guidelines for the biological treatment of bipolar disorders, part III: maintenance treatment. World J Biol Psychiatry, 2004. 5(3): p. 120-135.
- 399. Mahli, G.S., Bassett, D., Boyce, P., Bryant, R., Fitzgerald, P.B., Fritz, K., ... Singh, A.B., Royal Australian and New Zealand College of Psychiatrists clinical practice guidelines for mood disorders. Aust N Z J Psychiatry, 2015. 49(12): p. 1087-1206.

- 400. Royal Australian and New Zealand College of Psychiatrists Clinical Practice Guidelines Team for the Treatment of Schizophrenia and Related Disorders, Royal Australian and New Zealand College of Psychiatrists clinical practice guidelines for the treatment of schizophrenia and related disorders. Aust N Z J Psychiatry, 2005. 39(1-2): p. 30.
- 401. Startup, M., Jackson, M.C., & Bendix, S., North Wales randomized controlled trial of cognitive behaviour therapy for acute schizophrenia spectrum disorders: outcomes at 6 and 12 months. Psychol Med, 2004. 34(3): p. 413-22.
- 402. Henry, L.P., Edwards, J., Jackson, H.J., Hulbert, C., & McGorry, P.D., Cognitively oriented psychotherapy for first episode psychosis (COPE): A practitioner's manual. 2002, Melbourne: EPPIC: The Early Psychosis Prevention and Intervention Centre.
- 403. Jackson, H.J., McGorry, P.D., Henry, L., Edwards, J., Hulbert, C., Harrigan, S., ... Power, P., Cognitively oriented psychotherapy for early psychosis (COPE): a 1-year follow-up. Br J Clin Psychol, 2001. 40(Pt 1): p. 57-70.
- 404.Jackson, H.J., McGorry, P.D., Edwards, J., Hulbert, C., Henry, L., Harrigan, S., ... Power, P., A controlled trial of cognitively oriented psychotherapy for early psychosis (COPE) with four-year follow-up readmission data. Psychol Med, 2005. 35(9): p. 1295-306.
- 405. Jackson, H.J., Edwards, J., Hulbert, C., & McGorry, P.D., Recovery from psychosis: psychological interventions, in The recognition and management of early psychosis: a preventive approach, McGorry P.D., & Jackson, H.J., Editors. 1999, Cambridge University Press: Cambridge.
- 406.Jackson, H.J., McGorry, P.D., Edwards, J., & Hulbert, C., Cognitively oriented psychotherapy for early psychosis (COPE), in Early intervention and preventative application of clinical psychology, Cotton, P., & Jackson, H.J., Editors. 1996, Australian Academic Press: Brisbane.
- 407. Jolley, S., Garety, P., Craig, T., Dunn, G., White, J., & Aitken, M., Cognitive therapy in early psychosis: A pilot randomized controlled trial. Behav Cog Psychother, 2003. 31(4): p. 473-478.
- 408. Waldheter, E.J., Penn, D.L., Perkins, D.O., Mueser, K.T., Owens, L.W., & Cook, E., The graduated recovery intervention program for first episode psychosis: treatment development and preliminary data. J Comm Ment Health, 2008. 44(6): p. 443-55.
- 409. Penn, D.L., Uzenoff, S.R., Perkins, D., Mueser, K.T., Hamer, R., Waldheter, E., ... Cook, L., A pilot investigation of the Graduated Recovery Intervention Program (GRIP) for first episode psychosis. Schizophr Res, 2011. 125(2-3): p. 247-56.
- Mendella, P.D., Burton, C.Z., Tasca, G.A., Roy, P., St, & Twamley, E.W., Compensatory cognitive training for people with first-episode schizophrenia: Results from a pilot randomized controlled trial. Schizophr Res, 2015. 162(1-3): p. 108-111.
- Piskulic, D., Barbato, M., Liu, L., & Addington, J., Pilot study of cognitive remediation therapy on cognition in young people at clinical high risk of psychosis. Psychiatry Research, 2015. 225(1-2): p. 93-98.
- Christensen, T.V., L.; Krarup, G.; Olsen, B.; Melau, M.; Gluud, C.; Nordentoft, M., Cognitive remediation combined with an early intervention service in first episode psychosis. Acta Psychiatrica Scand, 2014. 130(4): p. 300-310.
- Bond, G., Drake, R. & Luciano, A., Employment and educational outcomes in early intervention programmes for early psychosis: A systematic review. Epidemiology and Psychiatric Sciences, 2015. 24(5): p. 446-457.
- Alvarez-Jimenez, M., Priede, A., Hetrick, S., Bendall, S., Killackey, E., Parker, A., ... Gleeson, J., Risk factors for relapse following treatment for first episode psychosis: a systematic review and meta-analysis of longitudinal studies. Schizophr Res, 2012. 139(1): p. 116-128.
- 415. Birchwood, M., Spencer, E. & McGovern, D., Schizophrenia: early warning signs. Adv Psychiatric Treatment, 2000. **6**(2): p. 93-101.

- 416. Alvarez-Jimenez, M., Parker, A.G., Hetrick, S.E., McGorry, P.D., & Gleeson, J.F., Preventing the second episode: A systematic review and meta-analysis of psychosocial and pharmacological trials in first-episode psychosis. Schizophr Bull, 2009.
- 417. Álvarez-Jiménez, M., Parker, A.G., Hetrick, S.E., McGorry, P.D., & Gleeson, J.F., Preventing the second episode: a systematic review and meta-analysis of psychosocial and pharmacological trials in first-episode psychosis. Schizophr Bull, 2011. 37(3): p. 619-630.
- 418. Kishimoto, T., Agarwal, V., Kishi, T., Leucht, S., Kane, J.M., & Correll, C.U., Relapse prevention in schizophrenia: a systematic review and meta-analysis of second-generation antipsychotics versus first-generation antipsychotics. Mol Psychiatry, 2013. 18(1): p. 53-66.
- 419. Leucht, S., Tardy, M., Komossa, K., Heres, S., Kissling, W., Salanti, G., & Davis, J.M., Antipsychotic drugs versus placebo for relapse prevention in schizophrenia: a systematic review and metaanalysis. Lancet, 2012. 379(9831): p. 2063-2071.
- 420. Gumley, A., O'Grady, M., McNay, L., Reilly, J., Power, K., & Norrie, J., Early intervention for relapse in schizophrenia: results of a 12-month randomized controlled trial of cognitive behavioural therapy. Psychol Med, 2003. 33(3): p. 419-31.
- Birchwood, M., Early intervention in psychotic relapse: cognitive approaches to detection and management. Behav Change, 1995. 12(1): p. 2-9.
- 422. Caseiro, O., Pérez-Iglesias, R., Mata, I., Martínez-Garcia, O., Pelayo-Terán, J.M., Tabares-Seisdedos, R., ... Crespo-Facorro, B., Predicting relapse after a first episode of non-affective psychosis: a three-year follow-up study. J Psychiatric Res, 2012. 46(8): p. 1099-1105.
- 423. Petersen, L., Jeppesen, P., Thorup, A., Abel, M.B., Ohlenschlaeger, J., Christensen, T.O., ... Nordentoft, M., A randomised multicentre trial of integrated versus standard treatment for patients with a first episode of psychotic illness. BMJ, 2005. 331(7517): p. 602.
- 424. Grawe, R., Falloon, I., Widen, J., & Skogvoll, E., Two years of continued early treatment for recent-onset schizophrenia: a randomised controlled study. Acta Psychiatrica Scandinavica, 2006. 114(5): p. 328-336.
- 425. Gleeson, J.F., Cotton, S.M., Alvarez-Jimenez, M., Wade, D., Gee, D., Crisp, K., ... McGorry, P.D., A randomized controlled trial of relapse prevention therapy for first-episode psychosis patients. J Clin Psychiatry, 2009. 70(4): p. 477-86.
- 426. Gleeson, J.F., Cotton, S.M., Alvarez-Jimenez, M., Wade, D., Gee, D., Crisp, K., ... McGorry, P.D., A randomized controlled trial of relapse prevention therapy for first-episode psychosis patients: outcome at 30-month follow-up. Schizophr Bull, 2013. 39(2): p. 436-48.
- 427. Pharoah, F., Mari, J., Rathbone, J., & Wong, W., Family intervention for schizophrenia. Cochr Database Syst Rev, 2010. 12.
- 428. Gleeson, J., Linszen, D. & Wiersma, D., Relapse prevention in early psychosis, in *The recognition and management of early* psychosis: a preventive approach, Jackson, H.J., & McGorry, P.D Editors. 2009, Cambridge University Press: Cambridge. p. 349-364.
- 429. Alvarez-Jimenez, M., Gleeson, J.F., Henry, L.P., Harrigan, S.M., Harris, M.G., Killackey, E., ... McGorry, P.D., Road to full recovery: longitudinal relationship between symptomatic remission and psychosocial recovery in first-episode psychosis over 7.5 years. Psychol Med, 2012. 42(3): p. 595-606.
- 430. Huber, C.G., Naber, D. & Lambert, M., Incomplete remission and treatment resistance in first-episode psychosis: definition, prevalence and predictors. Expert Opin Pharmacother, 2008. 9(12): p. 2027-2038.
- 431. Simonsen, E., Friis, S., Opjordsmoen, S., Mortensen, E.L., Haahr, U., Melle, I., ... McGlashan, T.H., Early identification of nonremission in first-episode psychosis in a two-year outcome study. Acta Psychiatr Scand, 2010. 122(5): p. 375-83.

- 432. Norman, R.M. & Malla, A.K., Duration of untreated psychosis: a critical examination of the concept and its importance. Psychol Med, 2001. 31(3): p. 381-400.
- 433. Lieberman, J.A., Prediction of outcome in first-episode schizophrenia. J Clin Psychiatry, 1993. 54 Suppl: p. 13-7.
- 434. Jones, P.B., Bebbington, P., Foerster, A., Lewis, S.W., Murray, R.M., Russell, A., ... Wilkins, S., Premorbid social underachievement in schizophrenia. Results from the Camberwell Collaborative Psychosis Study. Br J Psychiatry, 1993. 162: p. 65-71.
- 435. Miller, A.L., Crismon, M.L., Rush, A.J., Chiles, J., Kashner, T.M., Toprac, M., ... Shon, S., The Texas medication algorithm project: clinical results for schizophrenia. Schizophr Bull, 2004. 30(3): p. 627-47.
- 436. Lehman, A.F., Kreyenbuhl, J., Buchanan, R.W., Dickerson, F.B., Dixon, L.B., Goldberg, R., ... Steinwachs, D.M., The Schizophrenia Patient Outcomes Research Team (PORT): updated treatment recommendations 2003. Schizophr Bull, 2004. 30(2): p. 193-217.
- 437. Lambert, M., Naber, D. & Huber, C.G., Management of incomplete remission and treatment resistance in first-episode psychosis. Expert Opin Pharmacother, 2008. 9(12): p. 2039-2051.
- 438. Edwards, J., Cocks, J., Burnett, P., Maud, D., Wong, L., Yuen, H.P., ... McGorry, P.D., Randomized controlled trial of clozapine and CBT for first-episode psychosis with enduring positive symptoms: A pilot study. Schizophr Res Treatment, 2011.
- 439. Herrmann-Doig, T., Maude, D. & Edwards, J., Systematic Treatment of Persistent Psychosis (STOPP): A psychological approach to facilitating recovery in young people with first-episode psychosis. 2002: Taylor & Francis.
- 440.Essali, A., Al-Haj Haasan, N., Li, C., & Rathbone, J., Clozapine versus typical neuroleptic medication for schizophrenia. Cochr Database Syst Rev, 2009(1): p. CD000059.
- 441. Leucht, S., Pitschel-Walz, G., Engel, R.R., & Kissling, W., Amisulpride, an unusual "atypical" antipsychotic: a meta-analysis of randomized controlled trials. Am J Psychiatry, 2002. 159(2): p. 180-90.
- 442. Storosum, J.G., Elferink, A.J., van Zwieten, B.J., van Strik, R., Hoogendijk, W.J., & Broekmans, A.W., Amisulpride: is there a treatment for negative symptoms in schizophrenia patients? Schizophr Bull. 2002. 28(2): p. 193-201.
- 443. Sommer, I.E., Begemann, M.J., Temmerman, A., & Leucht, S., Pharmacological augmentation strategies for schizophrenia patients with insufficient response to clozapine: a quantitative literature review. Schizophr Bull, 2012. 38(5): p. 1003-11.
- 444.Kho, K.H., Blansjaar, B.A., de Vries, S., Babuskova, D., Zwinderman, A.H., & Linszen, D.H., Electroconvulsive therapy for the treatment of clozapine nonresponders suffering from schizophrenia - an open label study. Eur Arch Psychiatry Clin Neurosci, 2004. 254(6): p. 372-9.
- 445. Zhang, Z.J., Chen, Y.C., Wang, H.N., Wang, H.H., Xue, Y.Y., Feng, S.F., & Tan, Q.R., Electroconvulsive therapy improves antipsychotic and somnographic responses in adolescents with first-episode psychosis a case-control study. Schizophr Res, 2012. 137(1-3): p. 97-103
- 446. Suzuki, K., Awata, S., Takano, T., Ebina, Y., Takamatsu, K., Kajiwara, T., ... Matsuoka, H., Improvement of psychiatric symptoms after electroconvulsive therapy in young adults with intractable first-episode schizophrenia and schizophreniform disorder. Tohoku J Exp Med. 2006. 210(3): p. 213-20.
- 447. de la Serna, E., Flamarique, I., Castro-Fornieles, J., Pons, A., Puig, O., Andres-Perpina, S., ... Baeza, I., Two-year follow-up of cognitive functions in schizophrenia spectrum disorders of adolescent patients treated with electroconvulsive therapy. J Child Adolesc Psychopharmacol, 2011. 21(6): p. 611-9.
- 448.Burns, A.M., Erickson, D.H. & Brenner, C.A., Cognitive-behavioral therapy for medication-resistant psychosis: a meta-analytic review. Psychiatr Serv, 2014: p. 7.

- 449. Herrman-Doig, T., Maude, D. & Edwards, J., Systematic treatment of persistent psychosis: a psychological approach to facilitating recovery in young people with first episode psychosis. 2003. Martin Dunitz: London
- 450. Falzer, P.R., Stayner, D.A. & Davidson, L., Principles and strategies for developing psychosocial treatments for negative symptoms in early course psychosis, in *Psychological* interventions in early psychosis: A treatment handbook, Gleeson, J.F., & McGorry, P.D., Editors. 2004, John Wiley & Sons: Chichester
- 451. Kingdon, D.G. & Turkington, D., Cognitive therapy of schizophrenia. 2004, New York: Guilford Press.
- 452. Hutton, P., Morrison, A.P., Wardle, M., & Wells, A., Metacognitive therapy in treatment-resistant psychosis: a multiplebaseline study. Behav Cogn Psychother, 2014. 42(2): p. 166-85.
- 453. Temple, S. & Ho, B.C., Cognitive therapy for persistent psychosis in schizophrenia: a case-controlled clinical trial. Schizophr Res, 2005. 74(2-3): p. 195-9.
- 454. Durham, R.C., Guthrie, M., Morton, R.V., Reid, D.A., Treliving, L.R., Fowler, D., & Macdonald, R.R., Tayside-Fife clinical trial of cognitive-behavioural therapy for medication-resistant psychotic symptoms. Results to 3-month follow-up. Br J Psychiatry, 2003. 182: p. 303-11.
- 455. Erickson, D.H., Cognitive-behaviour therapy for medicationresistant positive symptoms in early psychosis: a case series. Early Int Psychiatry, 2010. 4(3): p. 251-256.
- 456. Alvarez-Jimenez, M., Priede, A., Hetrick, S.E., Bendall, S., Killackey, E., Parker, A.G., ... Gleeson, J.F., Risk factors for relapse following treatment for first episode psychosis: a systematic review and meta-analysis of longitudinal studies. Schizophr Res, 2012. 139(1-3): p. 116-28.
- 457. Chen, E.Y., Hui, C.L., Lam, M.M., Chiu, C.P., Law, C.W., Chung, D.W., ... Honer, W.G., Maintenance treatment with quetiapine versus discontinuation after one year of treatment in patients with remitted first episode psychosis: randomised controlled trial. BMJ: British Medical Journal. 2010. 341: p. c4024.
- 458. Emsley, R., Nuamah, I., Hough, D., & Gopal, S., Treatment response after relapse in a placebo-controlled maintenance trial in schizophrenia. Schizophr Res, 2012. 138(1): p. 29-34.
- 459. Gitlin, M., Nuechterlein, K., Subotnik, K.L., Ventura, J., Mintz, J., Fogelson, D.L., ... Aravagiri, M., Clinical outcome following neuroleptic discontinuation in patients with remitted recent-onset schizophrenia. Am J Psychiatry, 2001. 158(11): p. 1835-42.
- 460.McGorry, P., Alvarez-Jimenez, M. & Killackey, E., Antipsychotic medication during the critical period following remission from firstepisode psychosis: less is more. JAMA Psychiatry, 2013. 70(9): p. 898-900.
- 461. Wunderink, L., Nieboer, R.M., Wiersma, D., Sytema, S., & Nienhuis, F.J., Recovery in remitted first-episode psychosis at 7 years of follow-up of an early dose reduction/discontinuation or maintenance treatment strategy: long-term follow-up of a 2-year randomized clinical trial. JAMA Psychiatry, 2013. 70(9): p. 913-20.
- 462. Steffen, S., Kosters, M., Becker, T., & Puschner, B., Discharge planning in mental health care: a systematic review of the recent literature. Acta Psychiatr Scand, 2009. 120(1): p. 1-9.
- 463. Callaly, T., Hyland, M., Trauer, T., Dodd, S., & Berk, M., Readmission to an acute psychiatric unit within 28 days of discharge: identifying those at risk. Aust Health Rev, 2010. 34(3): p. 282-5.
- 464. Boyer, C., McAlpine, D., Pottick, K., & Olfson, M., Identifying risks factors and key strategies in linkage to outpatient psychiatric care. Am J Psychiatry, 2000. 157: p. 1592–98.
- 465. Stavely, H., Hughes, F., Pennell, K, McGorry, P.D, Purcell, P., EPPIC model & service implementation. 2013, Parkville, Vic: Orygen Youth Health Research Centre.

- 466. Power, P. & Robinson, J., Suicide prevention in first-episode psychosis, in *The Recognition and Management of Early Psychosis:* A Preventative Approach, McGorry P.D., & Jackson, H.J., Editors. 2009, Cambridge University Press: Cambridge.
- 467. Martin, D.J., Garske, J.P. & Davis, M.K., Relation of the therapeutic alliance with outcome and other variables: a meta-analytic review. J Consult Clin Psychol, 2000. 68(3): p. 438-50.
- 468. Karver, M.S., Handelsman, J.B., Fields, S., & Bickman, L., Metaanalysis of therapeutic relationship variables in youth and family therapy: the evidence for different relationship variables in the child and adolescent treatment outcome literature. Clin Psychol Rev, 2006. 26(1): p. 50-65.
- 469. Lawrence, D., Hancock, K.J. & Kisely, S., The gap in life expectancy from preventable physical illness in psychiatric patients in Western Australia: retrospective analysis of population based registers. BMJ, 2013. 346: p. f2539.
- 470. Beebe, L.H., Obesity in schizophrenia: screening, monitoring, and health promotion. Perspect Psychiatr Care, 2008. 44(1): p. 25-31.
- 471. De Hert, M., Detraux, J., van Winkel, R., Yu, W., & Correll, C.U., Metabolic and cardiovascular adverse effects associated with antipsychotic drugs. Nat Rev Endocrinol, 2012. 8(2): p. 114-26.
- 472. Nyboe, L. & Lund, H., Low levels of physical activity in patients with severe mental illness. Nord J Psychiatry, 2013. 67(1): p. 43-6.
- 473. Kwan, C.L., Gelberg, H.A., Rosen, J.A., Chamberlin, V., Shah, C., Nguyen, C., ... Ames, D., Nutritional counseling for adults with severe mental illness: key lessons learned. J Acad Nutr Diet, 2014. 114(3): p. 369-74.
- 474. Galletly, C.A., Foley, D.L., Waterreus, A., Watts, G.F., Castle, D.J., McGrath, J.J., ... Morgan, V.A., Cardiometabolic risk factors in people with psychotic disorders: the second Australian national survey of psychosis. Aust N Z J Psychiatry, 2012. 46(8): p. 753-61
- 475. Mitchell, A.J., Vancampfort, D., Sweers, K., van Winkel, R., Yu, W., & De Hert, M., Prevalence of metabolic syndrome and metabolic abnormalities in schizophrenia and related disorders--a systematic review and meta-analysis. Schizophr Bull, 2013. 39(2): p. 306-18.
- 476. Cohen, D. & De Hert, M., Endogenic and iatrogenic diabetes mellitus in drug-naive schizophrenia: the role of olanzapine and its place in the psychopharmacological treatment algorithm. Neuropsychopharmacology, 2011. 36(11): p. 2368-9.
- Allison, D.B., Mentore, J.L., Heo, M., Chandler, L.P., Cappelleri, J.C., Infante, M.C., & Weiden, P.J., Antipsychotic-induced weight gain: a comprehensive research synthesis. Am J Psychiatry, 1999. 156(11): p. 1686-96.
- 478. Kinon, B.J., Basson, B.R., Gilmore, J.A., & Tollefson, G.D., Long-term olanzapine treatment: weight change and weight-related health factors in schizophrenia. J Clin Psychiatry, 2001. 62(2): p. 92-100.
- 479. Wirshing, D.A., Pierre, J.M., Erhart, S.M., & Boyd, J.A., Understanding the new and evolving profile of adverse drug effects in schizophrenia. Psychiatr Clin North Am, 2003. 26(1): p. 165-90.
- 480. Alvarez-Jimenez, M., Hetrick, S.E., Gonzalez-Blanch, C., Gleeson, J.F., & McGorry, P.D., Non-pharmacological management of antipsychotic-induced weight gain: systematic review and metaanalysis of randomised controlled trials. Br J Psychiatry, 2008. 193(2): D. 101-7.
- 481. Correll, C.U., Manu, P., Olshanskiy, V., Napolitano, B., Kane, J.M., & Malhotra, A.K., Cardiometabolic risk of second-generation antipsychotic medications during first-time use in children and adolescents. Jama Psychiatry, 2009. 302(16): p. 1765-1773.
- 482. Correll, C.U., Leucht, S. & Kane, J.M., Lower risk for tardive dyskinesia associated with second-generation antipsychotics: a systematic review of 1-year studies. Am J Psychiatry, 2004. 161(3): p. 414-25.

- 483. Leucht, S., Pitschel-Walz, G., Abraham, D., & Kissling, W., Efficacy and extrapyramidal side-effects of the new antipsychotics olanzapine, quetiapine, risperidone, and sertindole compared to conventional antipsychotics and placebo. A meta-analysis of randomized controlled trials. Schizophr Res, 1999. 35(1): p. 51-68.
- 484.Curtis, J., Newall, H.D. & Samaras, K., The heart of the matter: cardiometabolic care in youth with psychosis. Early Interv Psychiatry, 2012. 6(3): p. 347-53.
- 485. Curtis, J., Watkins, A., Rosenbaum, S., Teasdale, S., Kalucy, M., Samaras, K., & Ward, P.B., Evaluating an individualized lifestyle and life skills intervention to prevent antipsychotic-induced weight gain in first-episode psychosis. Early Interv Psychiatry, 2015.
- 486. Alvarez-Jiménez, M., González-Blanch, C., Crespo-Facorro, B., Hetrick, S., Rodríguez-Sánchez, J.M., Pérez-Iglesias, R., & Vázquez-Barquero, J.L., Antipsychotic-induced weight gain in chronic and first-episode psychotic disorders: a systematic critical reappraisal. CNS Drugs, 2008. 22(7): p. 547-62.
- 487. Rosenbaum, S., Tiedemann, A., Sherrington, C., Curtis, J., & Ward, P.B., Physical activity interventions for people with mental illness: a systematic review and meta-analysis. J Clin Psychiatry, 2014. 75(9): p. 1,478-974.
- 488. McCreadie, R.G. & Scottish Schizophrenia Lifestyle Group, Diet, smoking and cardiovascular risk in people with schizophrenia: descriptive study. Br J Psychiatry, 2003. 183: p. 534-9.
- 489. Brown, S., Birtwistle, J., Roe, L., & Thompson, C., The unhealthy lifestyle of people with schizophrenia. Psychol Med, 1999. 29(3): p. 697-701.
- 490. Dipasquale, S., Pariante, C.M., Dazzan, P., Aguglia, E., McGuire, P., & Mondelli, V., The dietary pattern of patients with schizophrenia: a systematic review. J Psychiatr Res, 2013. 47(2): p. 197-207.
- 491. Mirza, I., Day, R., Wulff-Cochrane, V., & Phelan, M., *Oral health of psychiatric in-patients*. The Psychiatrist, 2001. **25**(4): p. 143-
- 492. Cullinan, M., Ford, P. & Seymour, G., Periodontal disease and systemic health: current status. Australian Dental Journal, 2009. 54(s1): p. S62-S69.
- 493. Williams, R.C., Barnett, A., Claffey, N., Davis, M., Gadsby, R., Kellett, M., ... Thackray, S., The potential impact of periodontal disease on general health: a consensus view. Current Medical Research and Opinion, 2008. 24(6): p. 1635-1643.
- 494. Desvarieux, M., Demmer, R.T., Rundek, T., Boden-Albala, B., Jacobs, D.R., Papapanou, P.N., & Sacco, R.L., Relationship between periodontal disease, tooth loss, and carotid artery plaque The Oral Infections and Vascular Disease Epidemiology Study (INVEST). Stroke, 2003. 34(9): p. 2120-2125.
- 495. Kisely, S., Quek, L.-H., Pais, J., Lalloo, R., Johnson, N.W., & Lawrence, D., Advanced dental disease in people with severe mental illness: systematic review and meta-analysis. Br J Psychiatry, 2011. 199(3): p. 187-193.
- 496. Kisely, S., Baghaie, H., Lalloo, R., Siskind, D., & Johnson, N.W., A systematic review and meta-analysis of the association between poor oral health and severe mental illness. Psychosomatic Medicine, 2015. 77(1): p. 83-92.
- 497. Lewis, S., Jagger, R.G. & Treasure, E., The oral health of psychiatric in-patients in South Wales. Special Care in Dentistry, 2001. 21(5): p. 182-186.
- 498. Ramon, T., Grinshpoon, A., Zusman, S., & Weizman, A., Oral health and treatment needs of institutionalized chronic psychiatric patients in Israel. Eur Psychiatry, 2003. 18(3): p. 101-105.
- 499. Pencer, A. & Addington, J., Substance use and cognition in early psychosis. J Psychiatry Neurosci, 2003. 28(1): p. 48-54.

- 500.Barrowclough, C., Haddock, G., Wykes, T., Beardmore, R., Conrod, P., Craig, T., ... Lewis, S., Integrated motivational interviewing and cognitive behavioural therapy for people with psychosis and comorbid substance misuse: randomised controlled trial. BMJ, 2010. 341: p. c6325.
- Myles, N., Newall, H.D., Curtis, J., Nielssen, O., Shiers, D., & Large, M., Tobacco use before, at, and after first-episode psychosis: a systematic meta-analysis. J Clin Psychiatry, 2012. 73(4): p. 468-75.
- 502. Morgan, V.A., Waterreus, A., Jablensky, A., Mackinnon, A., McGrath, J.J., Carr, V., ... Saw, S., People living with psychotic illness in 2010: the second Australian national survey of psychosis. Aust N Z J Psychiatry, 2012. 46(8): p. 735-52.
- 503. Glassman, A.H., Cigarette smoking: implications for psychiatric illness. Am J Psychiatry, 1993. **150**(4): p. 546-53.
- 504. Pantuck, E.J., Pantuck, C.B., Anderson, K.E., Conney, A.H., & Kappas, A., Cigarette smoking and chlorpromazine disposition and actions. Clin Pharmacol Ther, 1982. 31(4): p. 533-8.
- 505. Goff, D.C., Henderson, D.C. & Amico, E., Cigarette smoking in schizophrenia: relationship to psychopathology and medication side effects. Am J Psychiatry, 1992. 149(9): p. 1189-94.
- 506. Glynn, S.M. & Sussman, S., Why patients smoke. Hosp Community Psychiatry, 1990. **41**(9): p. 1027-8.
- 507. Miller, D.D., Kelly, M.W., Perry, P.J., & Coryell, W.H., The influence of cigarette smoking on haloperidol pharmacokinetics. Biol Psychiatry, 1990. **28**(6): p. 529-31.
- 508. Desai, H.D., Seabolt, J. & Jann, M.W., Smoking in patients receiving psychotropic medications: a pharmacokinetic perspective. CNS Drugs, 2001. 15(6): p. 469-94.
- 509. Ereshefsky, L., Jann, M.W., Saklad, S.R., Davis, C.M., Richards, A.L., & Burch, N.R., Effects of smoking on fluphenazine clearance in psychiatric inpatients. Biol Psychiatry, 1985. 20(3): p. 329-32.
- 510. National Institute for Health and Care Excellence, *Psychosis* and schizophrenia in adults: prevention and management. 2014, London: NICE.
- Stubbs, B., Vancampfort, D., Bobes, J., De Hert, M., & Mitchell, A.J., How can we promote smoking cessation in people with schizophrenia in practice? A clinical overview. Acta Psychiatr Scand, 2015. 132(2): p. 122-30.
- Ragg, M. & Ahmed, T., Smoke and mirrors: a review of the literature on smoking and mental illness., in *Tackling Tobacco Program Research Series No.* 1. 2008: Sydney: Cancer Council NSW
- Curtis, J., Newall, H., Myles, N., Shiers, D., & Samaras, K., Considering metformin in cardiometabolic protection in psychosis. Acta Psychiatr Scand, 2012. 126(4): p. 302-3.
- 514. Myles, N., Newall, H.D., Curtis, J., Nielssen, O., Shiers, D., & Large, M., Tobacco use before, at and after first-episode psychosis: a systematic meta-analysis. J Clin Psychiatry, 2012. 73(4): p. 468-475.
- 515. ENSP Medical Management Writing Group, Medical Management in Early Psychosis: a guide for medical practitioners. 2014, Parkville: Orygen Youth Health Research Centre.
- Royal Australian College of General Practitioners, Guidelines for preventive activities in general practice, 8th edn. 2012, East Melbourne: RACGP.
- 517. Rissel, C., Heywood, W., de Visser, R.O., Simpson, J.M., Grulich, A.E., Badcock, P.B., ... Richters, J., First vaginal intercourse and oral sex among a representative sample of Australian adults: the Second Australian Study of Health and Relationships. Sexual Health, 2014. 11(5): p. 406-415.
- Mitchell, A., Patrick, K., Heywood, W., Blackman, P., & Pitts, M., Sth national survey of Australian secondary students and sexual health 2013. 2014.

- Marques, T.R., Smith, S., Bonaccorso, S., Gaughran, F., Kolliakou, A., Dazzan, P., ... Howes, O.D., Sexual dysfunction in people with prodromal or first-episode psychosis. Br J Psychiatry, 2012. 201: p. 131-6.
- 520. Malik, P., Kemmler, G., Hummer, M., Riecher-Roessler, A., Kahn, R.S., & Fleischhacker, W.W., Sexual dysfunction in firstepisode schizophrenia patients: results from European First Episode Schizophrenia Trial. Journal Of Clinical Psychopharmacology, 2011. 31(3): p. 274-280.
- 521. Montejo, A.L., Majadas, S., Rico-Villademoros, F., Llorca, G., De La Gándara, J., Franco, M., ... Prieto, N., Frequency of sexual dysfunction in patients with a psychotic disorder receiving antipsychotics. J Sex Med, 2010. 7(10): p. 3404-3413.
- 522. Rettenbacher, M.A., Hofer, A., Ebenbichler, C., Baumgartner, S., Edlinger, M., Engl, J., ... Fleischhacker, W.W., Prolactin levels and sexual adverse effects in patients with schizophrenia during antipsychotic treatment. J Clin Psychopharmacol, 2010. 30(6): p. 711-715.
- 523. Redmond, C., Larkin, M. & Harrop, C., The personal meaning of romantic relationships for young people with psychosis. Clin Child Psychology Psychiatry, 2010.
- 524. Giraldi, A. & Goldstein, I., Sexual health for all? J Sex Med, 2011. 8(8): p. 2119-2121.
- 525. Marques, A.J., Santos, T. & Queiros, C. Sexuality perceptions of people with schizophrenia: Preliminary results in a Portuguese sample. 2011 [cited 26; Available from: http://ovidsp.ovid.com/ ovidweb.cgi?T=JS&PAGE=reference&D= emed10&NEWS=N&AN=70417542.
- 526. Bushong, M.E., Nakonezny, P.A. & Byerly, M.J., Subjective quality of life and sexual dysfunction in outpatients with schizophrenia or schizoaffective disorder. J Sex Marital Therapy, 2013. 39(4): p. 336-346
- 527. Adrianzen, C., Arango-Davila, C., Araujo, D.M., Ruiz, I., Walton, R.J., Dossenbach, M., & Karagianis, J., Relative association of treatment-emergent adverse events with quality of life of patients with schizophrenia: post hoc analysis from a 3-year observational study. Hum Psychopharmacol, 2010. 25(6): p. 439-47.
- 528. Basson, R., Rees, P., Wang, R., Montejo, A.L., & Incrocci, L., Sexual function in chronic illness. J Sex Med, 2010. 7(1 Pt 2): p. 374-88
- 529. Lambert, M., Conus, P., Eide, P., Mass, R., Karow, A., Moritz, S., ... Naber, D., Impact of present and past antipsychotic side effects on attitude toward typical antipsychotic treatment and adherence. Eur Psychiatry, 2004. 19(7): p. 415-422.
- 530. Ucok, A., Incesu, C., Aker, T., & Erkoc, S., Do psychiatrists examine sexual dysfunction in schizophrenia patients? J Sex Med, 2008. 5(8): p. 2000-2001.
- 531. Dossenbach, M., Dyachkova, Y., Pirildar, S., Anders, M., Khalil, A., Araszkiewicz, A., ... Treuer, T., Effects of atypical and typical antipsychotic treatments on sexual function in patients with schizophrenia: 12-month results from the Intercontinental Schizophrenia Outpatient Health Outcomes (IC-SOHO) study. Euro Psychiatry, 2006. 21(4): p. 251-258.
- 532. McCann, E., Investigating mental health service user views regarding sexual and relationship issues. J Psychiatr Ment Health Nurs, 2010. 17(3): p. 251-259.
- 533. Dyer, K. & das Nair, R., Why don't healthcare professionals talk about sex? A systematic review of recent qualitative studies conducted in the United Kingdom. J Sex Med, 2013. 10(11): p. 2658-2670.
- 534. Serretti, A. & Chiesa, A., A meta-analysis of sexual dysfunction in psychiatric patients taking antipsychotics. Int Clin Psychopharmacol, 2011. 26(3): p. 130-140.
- 535. NNDSS Annual Report Writing Group, Australia's notifiable disease status, 2013: Annual report of the National Notifiable Diseases Surveillance System. Commun Dis Intell, 2015. 39(3): p. E387-477.

- 536. Shield, H., Fairbrother, G. & Obmann, H., Sexual health knowledge and risk behaviour in young people with first episode psychosis. Int J Ment Health Nurs, 2005. 14(2): p. 149-154.
- Brown, A., " Lubman, D.I. & Paxton, S.J., Reducing sexuallytransmitted infection risk in young people with first-episode psychosis. Int J Ment Health Nurs, 2011. 20: p. 12-20.
- 538. Brown, A., Lubman, D.I. & Paxton, S., Sexual risk behaviour in young people with first episode psychosis. Early Interv Psychiatry, 2010. 4(3): p. 234-42.
- 539. Peuskens, J., Pani, L., Detraux, J., & Hert, M., The Effects of Novel and Newly Approved Antipsychotics on Serum Prolactin Levels: A Comprehensive Review. CNS Drugs, 2014. 28(5): p. 421-453.
- 540. De Hert, M., Detraux, J. & Peuskens, J., Second-generation and newly approved antipsychotics, serum prolactin levels and sexual dysfunctions: a critical literature review. Expert Opin Drug Safety, 2014. 13(5): p. 605-624.
- 541. Rosen, A., Miller, V. & Parker, G., AIMHS (Area integrated Mental Health Services) Standards Manual. NSW Department of Health and Royal North Shore Hospital & Community Mental Health Services, Sydney, 1993.
- 542. Marshall, M. & Lockwood, A., Assertive community treatment for people with severe mental disorders. Cochr Database Syst Rev, 2000(2): p. CD001089.
- 543. Rosen, A. & Teesson, M., Does case management work? The evidence and the abuse of evidence-based medicine. Aust N Z J Psychiatry, 2001. 35(6): p. 731-746.
- 544. Smith, L. & Newton, R., Systematic review of case management. Aust N Z J Psychiatry, 2007. 41(1): p. 2-9.
- 545. Preston, N. & Fazio, S., Establishing the efficacy and cost effectiveness of community intensive case management of long-term mentally ill: a matched control group study. Aust N Z J Psychiatry, 2000. **34**(1): p. 114-121.
- 546. Kelly, J., Wellman, N. & Sin, J., HEART--the Hounslow Early Active Recovery Team: implementing an inclusive strength-based model of care for people with early psychosis. J Psychiatr Ment Health Nurs, 2009. 16(6): p. 569-77.
- 547. Rapp, C.A. & Goscha, R.J., The strengths model: a recoveryoriented approach to mental health services. 2011: Oxford University Press.
- 548. Killackey, E., Jackson, H.J. & McGorry, P.D., Vocational intervention in first-episode psychosis: individual placement and support v. treatment as usual. Br J Psychiatry, 2008. 193(2): p. 114-20
- 549. Leamy, M., Bird, V., Le Boutillier, C., Williams, J., & Slade, M., Conceptual framework for personal recovery in mental health: systematic review and narrative synthesis. Br J Psychiatry, 2011. 199(6): p. 445-52.
- 550. Mental Health Coordinating Council., Recovery for Young People: Recovery Orientation in Youth Mental Health and Child and Adolescent Mental Health Services (CAMHS): Discussion Paper. 2014. Mental Health Coordinating Council: Sydney, NSW
- Elwyn, G., Frosch, D., Thomson, R., Joseph-Williams, N., & Lloyd, A., Shared decision making: a model for clinical practice. J Gen Intern Med, 2012. 27: p. 1361–67.
- 552. Duncan, E., Best, C. & Hagen, S., Shared decision making interventions for people with mental health conditions. Cochr Database Syst Rev, 2010(1): p. CD007297.
- 553. Hamann, J., Langer, B., Winkler, V., Busch, R., Cohen, R., Leucht, S., & Kissling, W., Shared decision making for in-patients with schizophrenia. Acta Psychiatr Scand, 2006. 114(4): p. 265-73.
- 554. Hamann, J., Mendel, R., Meier, A., Asani, F., Pausch, E., Leucht, S., & Kissling, W., "How to speak to your psychiatrist": shared decision-making training for inpatients with schizophrenia. Psychiatr Serv, 2011.

- 555. Westermann, G.M., Verheij, F., Winkens, B., Verhulst, F.C., & Van Oort, F.V., Structured shared decision-making using dialogue and visualization: a randomized controlled trial. Patient Educ Couns, 2013. 90(1): p. 74–81.
- 556. Woltmann, E.M., Wilkniss, S.M., Teachout, A., McHugo, G.J., & Drake, R.E., Trial of an electronic decision support system to facilitate shared decision making in community mental health. Psychiatr Serv, 2011. 62(1): p. 54-60.
- 557. LeBlanc, A., Herrin, J., Williams, M.D., Inselman, J.W., Branda, M.E., Shah, N.D., ... Montori, V.M., Shared decision making for antidepressants in primary care: A cluster randomized trial. JAMA Intern Med, 2015. 175(11): p. 1761-70.
- 558. Aljumah, K. & Hassali, M.A., Impact of pharmacist intervention on adherence and measurable patient outcomes among depressed patients: a randomised controlled study. BMC Psychiatry, 2015. 15: p. 219.
- 559. Loh, A., Simon, D., Wills, C.E., Kriston, L., Niebling, W., & Harter, M., The effects of a shared decision-making intervention in primary care of depression: a cluster-randomized controlled trial. Patient Educ Couns, 2007. 67(3): p. 324-32.
- 560. Dixon, L.B., Glynn, S.M., Cohen, A.N., Drapalski, A.L., Medoff, D., Fang, L.J., ... Gioia, D., Outcomes of a brief program, REORDER, to promote consumer recovery and family involvement in care. Psychiatr Serv, 2014. 65(1): p. 116-20.
- 561. Joosten, E.A., de Jong, C.A., de Weert-van Oene, G.H., Sensky, T., & van der Staak, C.P., Shared decision-making reduces drug use and psychiatric severity in substance-dependent patients. Psychother Psychosom, 2009. 78(4): p. 245-53.
- 562. Agerbo, E., Byrne, M., Eaton, W.W., & Mortensen, P.B., Marital and labor market status in the long run in schizophrenia. Arch Gen Psychiatry. 2004. 61(1): p. 28-33.
- Hirschberg, W., Social isolation among schizophrenic out-patients.
 Social Psychiatry, 1985. 20(4): p. 171-178.
- 564. Wiersma, D., Social disability in schizophrenia: its development and prediction over 15 years in incidence cohorts in six European centres. Psychol Med, 2000. **30**(05): p. 1155.
- 565. Killackey, E., Jackson, H.J., Fowler, D., & Nuechterlein, K.H., Enhancing work functioning in early psychosis - The Recognition and Management of Early Psychosis. 2009: Cambridge University Press.
- 566. Gold, J., Goldberg, R., McNary, S., Dixon, L., & Lehman, A., Cognitive Correlates of Job Tenure Among Patients With Severe Mental Illness. Am J Psychiatry, 2002. 159(8): p. 1395-1402.
- 567. O'Flynn, D., Approaching employment. Mental health, work projects and the Care Programme Approach, 2001. 25(5): p. 169-171
- 568. Drake, R.E., McHugo, G.J., Becker, D.R., Anthony, W.A., & Clark, R.E., The New Hampshire study of supported employment for people with severe mental illness. J Consult Clin Psychol, 1996. 64(2): p. 391-9.
- 569. Mental Health Coordinating Council., Recovery for Young People: Recovery Orientation in Youth Mental Health and Child and Adolescent Mental Health Services (CAHMS): Discussion Paper. HMCC, 2014.
- 570. Becker, D.R., Drake, R.E., A working life for peple with severe mental illness. 2003, New York: Oxford University Press.
- 571. Bond, G.R., Supported employment: evidence for an evidence-based practice. Psychiatr Rehabil J, 2004. 27(4): p. 345-59.
- 572. Major, B.S., Hinton, M.F., Flint, A., Chalmers-Brown, A., McLoughlin, K., & Johnson, S., Evidence of the effectiveness of a specialist vocational intervention following first episode psychosis: a naturalistic prospective cohort study. Soc Psychiatry Psychiatr Epidemiol, 2010. 45(1): p. 1-8.

- 573. Nuechterlein, K.H., Advances in improving and predicting work outcome in recent-onset schizophrenia. Schizophr Bull, 2005. 31(2): p. 530.
- 574. Rinaldi, M., What are the benefits of evidence-based supported employment for patients with first-episode psychosis? Psychiatr Bull, 2004. 28(8): p. 281-284.
- 575. International First Episode Vocational Recovery Group, Meaningful lives: Supporting young people with psychosis in education, training and employment: an international consensus statement. Early Int Psychiatry, 2010. 4(4): p. 323-6.
- 576. Secker, B.G., Patience Seebohm, Jenny, Challenging barriers to employment, training and education for mental health service users: The service user's perspective. J Ment Health, 2001. 10(4): p. 395-404.
- 577. Ramsay, C.E., Broussard, B., Goulding, S.M., Cristofaro, S., Hall, D., Kaslow, N.J., ... Compton, M.T., Life and treatment goals of individuals hospitalized for first-episode nonaffective psychosis. Psychiatry Res, 2011. 189(3): p. 344-8.
- 578. lyer, S.N., Loohuis, H., Pawliuk, N., Joober, R., & Malla, A.K., Concerns reported by family members of individuals with firstepisode psychosis. Early Interv Psychiatry, 2011. 5(2): p. 163-7.
- 579. Chinnery, G., Working it out: vocational recovery in first episode psychosis, ed. C. Orygen Youth Health Research. 2013, Parkville, Vic: Orygen Youth Health Research Centre.
- 580. Mesholam-Gately, R.I., Giuliano, A.J., Goff, K.P., Faraone, S.V., & Seidman, L.J., Neurocognition in first-episode schizophrenia: a meta-analytic review. Neuropsychology, 2009. 23(3): p. 315-36.
- 581. Fett, A.-K.J., Viechtbauer, W., Penn, D.L., van Os, J., & Krabbendam, L., The relationship between neurocognition and social cognition with functional outcomes in schizophrenia: a metaanalysis. Neuroscience & Biobehavioral Reviews, 2011. 35(3): p. 573-588.
- 582. Allott, K.A., Cotton, S.M., Chinnery, G.L., Baksheev, G.N., Massey, J., Sun, P., ... Killackey, E., The relative contribution of neurocognition and social cognition to 6-month vocational outcomes following Individual Placement and Support in firstepisode psychosis. Schizophr Res, 2013. 150(1): p. 136-43.
- 583. Wykes, T., Huddy, V., Cellard, C., McGurk, S.R., & Czobor, P., A meta-analysis of cognitive remediation for schizophrenia: methodology and effect sizes. Am J Psychiatry, 2011. 168(5): p. 472-85.
- 584. Wykes, T., Newton, E., Landau, S., Rice, C., Thompson, N., & Frangou, S., Cognitive remediation therapy (CRT) for young early onset patients with schizophrenia: an exploratory randomized controlled trial. Schizophr Res, 2007. 94(1-3): p. 221-30.
- 585. Lee, R.S., Redoblado-Hodge, M.A., Naismith, S.L., Hermens, D.F., Porter, M.A., & Hickie, I.B., Cognitive remediation improves memory and psychosocial functioning in first-episode psychiatric out-patients. Psychol Med, 2013. 43(6): p. 1161-73.
- 586. Eack, S.M., Greenwald, D.P., Hogarty, S.S., & Keshavan, M.S., One-year durability of the effects of cognitive enhancement therapy on functional outcome in early schizophrenia. Schizophr Res, 2010. 120(1-3): p. 210-6.
- 587. Eack, S.M., Hogarty, G.E., Cho, R.Y., Prasad, K.M., Greenwald, D.P., Hogarty, S.S., & Keshavan, M.S., Neuroprotective effects of cognitive enhancement therapy against gray matter loss in early schizophrenia: results from a 2-year randomized controlled trial. Arch Gen Psychiatry, 2010. 67(7): p. 674-82.
- 588. Barlati, S., De Peri, L., Deste, G., & Vita, A., Non-pharmacological interventions in early schizophrenia: focus on cognitive remediation. J Psychopathology, 2015. 21: p. 1-12.
- 589. Revell, E.R., Neill, J.C., Harte, M., Khan, Z., & Drake, R.J., A systematic review and meta-analysis of cognitive remediation in early schizophrenia. Schizophr Res, 2015. 168(1-2): p. 213-22.

- 590. Allott, K.A., Killackey, E., Sun, P., Brewer, W.J., & Velligan, D.I., Feasibility and acceptability of cognitive adaptation training for first-episode psychosis. Early Interv Psychiatry, 2014.
- 591. Velligan, D.I., Bow-Thomas, C.C., Huntzinger, C., Ritch, J., Ledbetter, N., Prihoda, T.J., & Miller, A.L., Randomized controlled trial of the use of compensatory strategies to enhance adaptive functioning in outpatients with schizophrenia. Am J Psychiatry, 2000.
- 592. Maples, N.J. & Velligan, D.I., Cognitive adaptation training: establishing environmental supports to bypass cognitive deficits and improve functional outcomes. Am J Psychiatr Rehab, 2008. 11(2): n. 164-180
- 593. Twamley, E.W., Vella, L., Burton, C.Z., Heaton, R.K., & Jeste, D.V., Compensatory cognitive training for psychosis: effects in a randomized controlled trial. J Clin Psychiatry, 2012. 73(9): p. 1212-9.
- 594. Bendall, S., Jackson, H.J. & Hulbert, C.A., Childhood trauma and psychosis: Review of the evidence and directions for psychological interventions. Australian Psychologist, 2010. 45(4): p. 299-306.
- 595. Larkin, W. & Read, J., Childhood trauma and psychosis: Evidence, pathways, and implications. J Postgrad Med, 2008. 54(4): p. 287-293.
- 596. Varese, F., Smeets, F., Drukker, M., Lieverse, R., Lataster, T., Viechtbauer, W., ... Bentall, R.P., Childhood adversities increase the risk of psychosis: a meta-analysis of patient-control, prospectiveand cross-sectional cohort studies. Schizophr Bull, 2012. 38(4): p. 661-671.
- 597. Bechdolf, A., Thompson, A., Nelson, B., Cotton, S., Simmons, M.B., Amminger, G.P., ... Yung, A.R., Experience of trauma and conversion to psychosis in an ultra-high-risk (prodromal) group. Acta Psychiatr Scand, 2010. 121(5): p. 377-384.
- 598. Brewin, C.R., Andrews, B. & Valentine, J.D., Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. J Consult Clin Psychol, 2000. 68(5): p. 748-66.
- 599. Bendall, S., Alvarez-Jimenez, M., Hulbert, C.A., McGorry, P.D., & Jackson, H.J., Childhood trauma increases the risk of posttraumatic stress disorder in response to first-episode psychosis. Aust N Z J Psychiatry, 2012. 46(1): p. 35-9.
- 600.Berry, K., Ford, S., Jellicoe-Jones, L., & Haddock, G., PTSD symptoms associated with the experiences of psychosis and hospitalisation: a review of the literature. Clin Psychol Rev, 2013. 33(4): p. 526-38.
- 601. Jackson, C., Knott, C., Skeate, A., & Birchwood, M., The trauma of first episode psychosis: the role of cognitive mediation. Aust N Z J Psychiatry, 2004. 38(5): p. 327-33.
- 602. Mueser, K.T., Lu, W., Rosenberg, S.D., & Wolfe, R., The trauma of psychosis: posttraumatic stress disorder and recent onset psychosis. Schizophr Res, 2010. 116(2-3): p. 217-27.
- 603. Tarrier, N., Khan, S., Cater, J., & Picken, A., The subjective consequences of suffering a first episode psychosis: trauma and suicide behaviour. Soc Psychiatry Psychiatr Epidemiol, 2007. 42(1): p. 29-35.
- 604.Bentall, R.P., Wickham, S., Shevlin, M., & Varese, F., Do specific early-life adversities lead to specific symptoms of psychosis? A study from the 2007 the Adult Psychiatric Morbidity Survey. Schizophr Bull, 2012: p. sbs049.
- 605. Sitko, K., Bentall, R.P., Shevlin, M., & Sellwood, W., Associations between specific psychotic symptoms and specific childhood adversities are mediated by attachment styles: an analysis of the National Comorbidity Survey. Psychiatry Res, 2014. 217(3): p. 202-209.
- 606.Bentall, R.P. & Fernyhough, C., Social predictors of psychotic experiences: specificity and psychological mechanisms. Schizophr Bull, 2008. 34(6): p. 1012-1020.

- 607. Australian Centre for Posttraumatic Mental Health, Australian Guidelines for the Treatment of Acute Stress Disorder and Posttraumatic Stress Disorder. 2013, Melbourne, Victoria: ACPMH - available from www.phoenixaustralia.org.
- 608. National Institute for Health and Clinical Excellence, Post-Traumatic Stress Disorder (PTSD): The Management of PTSD in Adults and Children in Primary and Secondary Care. Clinical Guideline 26. 2005, London: NICE. Available at www.nice.org.uk.
- 609. van den Berg, D.P. & van der Gaag, M., *Treating trauma in psychosis with EMDR: a pilot study.* J Behav Therapy Experim Psychiatry, 2012. **43**(1): p. 664-671.
- 610. de Bont, P.A., van Minnen, A. & de Jongh, A., Treating PTSD in patients with psychosis: a within-group controlled feasibility study examining the efficacy and safety of evidence-based PE and EMDR protocols. Behavior Therapy, 2013. 44(4): p. 717-730.
- 611. van den Berg, D.P., de Bont, P.A., van der Vleugel, B.M., De Roos, C., de Jongh, A., van Minnen, A., & van der Gaag, M., Traumafocused treatment in PTSD patients with psychosis: symptom exacerbation, adverse events, and revictimization. Schizophr Bull, 2015: p. 693-02
- 612. Kane, J.M., Schooler, N.R., Marcy, P., Correll, C.U., Brunette, M.F., Mueser, K.T., ... Robinson, D.G., The RAISE early treatment program for first-episode psychosis: background, rationale, and study design. J Clin Psychiatry, 2015. 76(3): p. 240-6.
- 613. Godolphin, W., Shared decision-making. Healthc Q, 2009. 12 p. e186-90.
- 614. Kane, J.M., Robinson, D.G., Schooler, N.R., Mueser, K.T., Penn, D.L., Rosenheck, R.A., ... Heinssen, R.K., Comprehensive Versus Usual Community Care for First-Episode Psychosis: 2-Year Outcomes From the NIMH RAISE Early Treatment Program. Am J Psychiatry, 2016. 173(4): p. 362-72.
- 615. Ruggeri, M., Bonetto, C., Lasalvia, A., Fioritti, A., de Girolamo, G., Santonastaso, P., ... Meneghelli, A., Feasibility and effectiveness of a multi-element psychosocial intervention for first-episode psychosis: Results from the cluster-randomized controlled GET UP PIANO trial in a catchment area of 10 million inhabitants. Schizophr Bull. 2015. 41(5): p. 1192-1203.
- 616. Thorup, A., Petersen, L., Jeppesen, P., Ohlenschlaeger, J., Christensen, T., Krarup, G., ... Nordentoft, M., Integrated treatment ameliorates negative symptoms in first episode psychosis--results from the Danish OPUS trial. Schizophr Res, 2005. 79(1): p. 95-105.
- 617. Jeppesen, P., Petersen, L., Thorup, A., Abel, M.B., Oehlenschlaeger, J., Christensen, T.O., ... Nordentoft, M., Integrated treatment of first-episode psychosis: effect of treatment on family burden: OPUS trial. Br J Psychiatry Suppl, 2005. 48: p. s85-90.
- 618. Secher, R.G., Hjorthoj, C.R., Austin, S.F., Thorup, A., Jeppesen, P., Mors, O., & Nordentoft, M., Ten-year follow-up of the OPUS specialized early intervention trial for patients with a first episode of psychosis. Schizophr Bull, 2015. 41(3): p. 617-26.
- 619. Garety, P.A., Craig, T.K., Dunn, G., Fornells-Ambrojo, M., Colbert, S., Rahaman, N., ... Power, P., Specialised care for early psychosis: symptoms, social functioning and patient satisfaction: randomised controlled trial. Br J Psychiatry, 2006. 188: p. 37-45.
- 620. Grawe, R.W., Falloon, I.R., Widen, J.H., & Skogvoll, E., Two years of continued early treatment for recent-onset schizophrenia: a randomised controlled study. Acta Psychiatr Scand, 2006. 114(5): p. 328-36.
- 621. Cullberg, J., Levander, S., Holmqvist, R., Mattsson, M., & Wieselgren, I.M., One-year outcome in first episode psychosis patients in the Swedish Parachute project. Acta Psychiatr Scand, 2002. 106(4): p. 276-85.
- 622. Agius, M., Shah, S., Ramkisson, R., Murphy, S., & Zaman, R., Three year outcomes of an early intervention for psychosis service as compared with treatment as usual for first psychotic episodes in a standard community mental health team - final results. Psychiatr Danub, 2007. 19(3): p. 130-8.

- 623. Kuipers, E., Holloway, F., Rabe-Hesketh, S., & Tennakoon, L., An RCT of early intervention in psychosis: Croydon Outreach and Assertive Support Team (COAST). Soc Psychiatry Psychiatr Epidemiol, 2004. **39**(5): p. 358-63.
- 624. Fowler, D., Hodgekins, J., Painter, M., Reilly, T., Crane, C., Macmillan, I., ... Jones, P.B., Cognitive behaviour therapy for improving social recovery in psychosis: a report from the ISREP MRC Trial Platform Study (Improving Social Recovery in Early Psychosis). Psychol Med, 2009. 39(10): p. 1627-36.
- 625. Jackson, C., Knott, C., Skeate, A., & Birchwood, M., *The trauma* of first episode psychosis: the role of cognitive mediation. Aust N Z J Psychiatry, 2004. **38**(5): p. 327-33.
- 626. Meyer, H., Taiminen, T., Vuori, T., Aijala, A., & Helenius, H., Posttraumatic stress disorder symptoms related to psychosis and acute involuntary hospitalization in schizophrenic and delusional patients. J Nerv Ment Dis, 1999. 187(6): p. 343-52.
- 627. Morrison, A.P., Frame, L. & Larkin, W., Relationships between trauma and psychosis: a review and integration. Br J Clin Psychol, 2003. 42(Pt 4): p. 331-53.
- 628. Fitzgerald, P. & Kulkarni, J., Home-oriented management programme for people with early psychosis. Br J Psychiatry Suppl, 1998. 172(33): p. 39-44.
- 629. Gould, M., Theodore, K., Pilling, S., Bebbington, P., Hinton, M., & Johnson, S., Initial treatment phase in early psychosis: can intensive home treatment prevent admission? Psychiatr Bull, 2006. 30(7): p. 243-246.
- 630. Addington, J. & Burnett, P., Working with families in the early stages of psychosis, in *Psychological interventions in early psychosis*. *A treatment handbook*, Gleeson, J.M., & McGorry, P.D., Editor. 2004, John Wiley & Sons: West Sussex. p. 99-116.
- Addington, J., Coldham, E.L., Jones, B., Ko, T., & Addington, D., The first episode of psychosis: the experience of relatives. Acta Psychiatr Scand, 2003. 108(4): p. 285-9.
- 632. Leggatt, M.S., Minimising collateral damage: family peer support and other strategies. Med J Aust, 2007. 187(7 Suppl): p. S61-3.
- 633. McNab, C., Haslam, N. & Burnett, P., Expressed emotion, attributions, utility beliefs, and distress in parents of young people with first episode psychosis. Psychiatry Res, 2007. 151(1): p. 97-106.
- 634. McGorry, P.D., "A stitch in time" ... the scope for preventive strategies in early psychosis. Eur Arch Psychiatry Clin Neurosci, 1998. 248(1): p. 22-31.
- 635. Bibou-Nakou, I., Dikaiou, M. & Bairactaris, C., Psychosocial dimensions of family burden among two groups of carers looking after psychiatric patients. Soc Psychiatry Psychiatr Epidemiol, 1997. 32(2): p. 104-8.
- 636. Jungbauer, J. & Angermeyer, M.C., Living with a schizophrenic patient: a comparative study of burden as it affects parents and spouses. Psychiatry, 2002. 65(2): p. 110-23.
- 637. Lenior, M.E., Dingemans, P.M., Linszen, D.H., de Haan, L., & Schene, A.H., Social functioning and the course of early-onset schizophrenia: five-year follow-up of a psychosocial intervention. Br J Psychiatry, 2001. 179: p. 53-8.
- 638. McNab, C. & Linszen, D., Family intervention in early psychosis, in The Recognition and Management of Early Psychosis: A Preventive Approach, Jackson, H.J. & McGorry, P.D., Editor. 2009, Cambridge University Press: New York. p. 305.
- 639. Schlosser, D.A., Zinberg, J.L., Loewy, R.L., Casey-Cannon, S., O'Brien, M.P., Bearden, C.E., ... Cannon, T.D., Predicting the longitudinal effects of the family environment on prodromal symptoms and functioning in patients at-risk for psychosis. Schizophr Res, 2010. 118(1-3): p. 69-75.
- 640.Nugter, A., Dingemans, P., Van der Does, J.W., Linszen, D., & Gersons, B., Family treatment, expressed emotion and relapse in recent onset schizophrenia. Psychiatry Res, 1997. **72**(1): p. 23-31.

- 641. Linszen, D., Dingemans, P., Van der Does, J.W., Nugter, A., Scholte, P., Lenior, R., & Goldstein, M.J., Treatment, expressed emotion and relapse in recent onset schizophrenic disorders. Psychol Med, 1996. 26(2): p. 333-42.
- 642. Gleeson, J., Jackson, H.J., Stavely, H., & Burnett, P., Family intervention in early psychosis. The recognition and management of early psychosis: A preventive approach, 1999: p. 376-406.
- 643. Grosse Holtforth, M., Reubi, I., Ruckstuhl, L., Berking, M., & Grawe, K., The value of treatment-goal themes for treatment planning and outcome evaluation of psychiatric inpatients. Int J Soc Psychiatry, 2004. 50(1): p. 80-91.
- 644. Driessen, M., Sommer, B., Rostel, C., Malchow, C.P., Rumpf, H.J., & Adam, B., Therapeutic goals in psychological medicine--state of research and development of a standardized self-rating instrument. Psychother Psychosom Med Psychol, 2001. 51(6): p. 239-45.
- 645. Tryon, G. & Winograd, G., Goal consensus and collaboration. Psychotherapy: Theory, Research and Practice, 2011. 48(1): p. 50-57.
- 646. Chinman, M.J., Allende, M., Weingarten, R., Steiner, J., Tworkowski, S., & Davidson, L., On the road to collaborative treatment planning: consumer and provider perspectives. J Behav Health Serv Res, 1999. 26(2): p. 211-8.
- 647. Miller, R. & Mason, S., Group Work with First Episode Schizophrenia Clients. Social Work with Groups, 1999. 21(1-2): p. 19-33.
- 648. Hoge, M.A., Farrell, S.P., Munchel, M.E., & Strauss, J.S., Therapeutic factors in partial hospitalization. Psychiatry, 1988. 51(2): p. 199-210.
- 649. Albiston, D.J., Francey, S.M. & Harrigan, S.M., Group programmes for recovery from early psychosis. Br J Psychiatry Suppl, 1998. 172(33): p. 117-21.
- 650. Norman, R.M., Malla, A.K., McLean, T.S., McIntosh, E.M., Neufeld, R.W., Voruganti, L.P., & Cortese, L., An evaluation of a stress management program for individuals with schizophrenia. Schizophr Res, 2002. 58(2-3): p. 293-303.
- Lecomte, T., Leclerc, C., Wykes, T., & Lecomte, J., Group CBT for clients with a first episode of schizophrenia. J Cog Psychotherapy, 2003. 17(4): p. 375-383.
- 652. Newton, E., Larkin, M., Melhuish, R., & Wykes, T., More than just a place to talk: Young people's experiences of group psychological therapy as an early intervention for auditory hallucinations. Br J Med Psychology, 2007. 80(1): p. 127-149.
- 653. Glick, I.D., Burti, L., Okonogi, K., & Sacks, M., Effectiveness in psychiatric care. III: Psychoeducation and outcome for patients with major affective disorder and their families. Br J Psychiatry, 1994. 164(1): p. 104-6.
- 654. Devine, E.C. & Westlake, S.K., The effects of psychoeducational care provided to adults with cancer: meta-analysis of 116 studies. Oncology Nursing Forum, 1995. 22(9): p. 1369-81.
- 655. Johnston, M., Voegele, C., Benefits of psychological preparation for surgery: a metaanalysis. Ann Behav Med, 1993. 15: p. 11.
- 656. Pekkala, E. & Merinder, L., Psychoeducation for schizophrenia. Cochr Database Syst Rev, 2002(2): p. CD002831.
- 657. Rund, B.R., Moe, L., Sollien, T., Fjell, A., Borchgrevink, T., Hallert, M., & Naess, P.O., The Psychosis Project: outcome and cost-effectiveness of a psychoeducational treatment programme for schizophrenic adolescents. Acta Psychiatr Scand, 1994. 89(3): p. 211-8.
- 658. Hauser, M., Lautenschlager, M., Gudlowski, Y., Ozgurdal, S., Witthaus, H., Bechdolf, A., ... Juckel, G., Psychoeducation with patients at-risk for schizophrenia--an exploratory pilot study. Patient Educ Couns, 2009. **76**(1): p. 138-42.

- 659. Kilkku, N., Munnukka, T. & Lehtinen, K., From information to knowledge: the meaning of information-giving to patients who had experienced first-episode psychosis. J Psychiatr Ment Health Nurs, 2003. 10(1): p. 57-64.
- 660. Rummel, C.B., Hansen, W.P., Helbig, A., Pitschel-Walz, G., & Kissling, W., Peer-to-peer psychoeducation in schizophrenia: a new approach. J Clin Psychiatry, 2005. 66(12): p. 1580-5.
- 661. Dixon, L.B. & Lehman, A.F., Family interventions for schizophrenia. Schizophr Bull, 1995. 21(4): p. 631-43.
- 662. Mari, J.J. & Streiner, D.L., An overview of family interventions and relapse on schizophrenia: meta-analysis of research findings. Psychol Med, 1994. 24(3): p. 565-78.
- 663. Tarrier, N., Barrowclough, C., Porceddu, K., & Fitzpatrick, E., The Salford Family Intervention Project: relapse rates of schizophrenia at five and eight years. Br J Psychiatry, 1994. 165(6): p. 829-32.
- 664. McGorry, P.D., Psychoeducation in first-episode psychosis: a therapeutic process. Psychiatry, 1995. **58**(4): p. 313-28.
- 665. Harris, A., Schiozphrenia, in How to Treat. 2008, Australian Doctor. p. 7.
- 666. Bronisch, T., The relationship between suicidality and depression. Archives of Suicide Research, 1996. 2(4): p. 235-254.
- 667. van der Sande, R., van Rooijen, L., Buskens, E., Allart, E., Hawton, K., van der Graaf, Y., & van Engeland, H., Intensive in-patient and community intervention versus routine care after attempted suicide. A randomised controlled intervention study. Br J Psychiatry, 1997. 171: p. 35-41.
- 668. Barak, Y., Mirecki, I., Knobler, H.Y., Natan, Z., & Aizenberg, D., Suicidality and second generation anytipsychotics in schizophrenia patients: a case-controlled retrospective study during a 5-year period. Psychopharmacology, 2004. 175(2): p. 215.
- 669. Meltzer, H.Y., Alphs, L., Green, A.I., Altamura, A.C., Anand, R., Bertoldi, A., ... International Suicide Prevention Trial Study, G., Clozapine treatment for suicidality in schizophrenia: International Suicide Prevention Trial (InterSePT). Arch Gen Psychiatry, 2003. 60(1): p. 82-91.
- 670. Tanney, B.L., *Electroconvulsive therapy and suicide*. Suicide Life Threat Behav, 1986. **16**(2): p. 198-222.
- 671. Parker, G., Roy, K., Hadzi Pavlovic, D., & Pedic, F., Psychotic (delusional) depression: a meta-analysis of physical treatments. J Affect Dis, 1992. 24(1): p. 17-24.
- 672. Coppen, A., Depression as a lethal disease: Prevention strategies. J Clin Psychiatry, 1994.
- 673. Tarrier, N., Haddock, G., Lewis, S., Drake, R., & Gregg, L., Suicide behaviour over 18 months in recent onset schizophrenic patients: the effects of CBT. Schizophr Res, 2006. 83(1): p. 15-27.
- 674. Kerkhof, A. & Diekstra, R., How to evaluate and deal with acute suicide risk. Preventive Strategies on Suicide, 1995. 2: p. 97.
- 675. Edwards, J., Hinton, M., Elkins, K., & Athanasopoulos, O., Cannabis and First-Episode Psychosis: The CAP Project. Substance misuse in psychosis: Approaches to Treatment and Service Delivery, 2003: p. 283-304.
- 676. Drake, R.E., Mercer-McFadden, C., Mueser, K.T., McHugo, G.J., & Bond, G.R., Review of integrated mental health and substance abuse treatment for patients with dual disorders. Schizophr Bull, 1998. 24(4): p. 589-608.
- 677. Wade, D., Hides, L., Baker, A., & Lubman, D.I., Substance misuse in first-episode psychosis, in *The recognition and management of* early psychosis: a preventive approach, Jackson H.J., & McGorry, P.D., Editors. 2009, Cambridge University Press: Cambridge. p. 243-256.
- 678. Hinton, M., Edwards, J., Elkins, K., Harrigan, S.M., Donovan, K., Purcell, R., & McGorry, P.D., Reductions in cannabis and other illicit substance use between treatment entry and early recovery in patients with first-episode psychosis. Early Int Psychiatry, 2007. 1(3): p. 259-266.

- 679. Copeland, J., Swift, W., Roffman, R., & Stephens, R., A randomized controlled trial of brief cognitive-behavioral interventions for cannabis use disorder. J Subst Abuse Treat, 2001. 21(2): p. 55-64; discussion 65-6.
- 680. Edwards, J., Elkins, K., Hinton, M., Harrigan, S.M., Donovan, K., Athanasopoulos, O., & McGorry, P.D., Randomized controlled trial of a cannabis-focused intervention for young people with firstepisode psychosis. Acta Psychiatr Scand, 2006. 114(2): p. 109-17.
- Kavanagh, D.J., Young, R., White, A., Saunders, J.B., Wallis, J., Shockley, N., ... Clair, A., A brief motivational intervention for substance misuse in recent-onset psychosis. Drug Alcohol Rev, 2004. 23(2): p. 151-5.
- 682. Tsuang, J., Fong, T.W., Pi, E., Pharmacological traetment of patients with schizophrenia and substance abuse disorders. Addict Disorders and their Treatment, 2005. 4(4): p. 10.
- 683. Rosenfarb, I.S., Bellack, A.S. & Aziz, N., Family interactions and the course of schizophrenia in African American and White patients. J Abnorm Psychol, 2006. 115(1): p. 112-20.
- 684.Lim, J., Rekhi, G., Rapisarda, A., Lam, M., Kraus, M., Keefe, R.S., & Lee, J., Impact of psychiatric comorbidity in individuals at Ultra High Risk of psychosis—Findings from the Longitudinal Youth at Risk Study (LYRIKS). Schizophr Res, 2015. 164(1): p. 8-14.
- 685. Moller, H.J., Antidepressive effects of traditional and second generation antipsychotics: a review of the clinical data. Eur Arch Psychiatry Clin Neurosci, 2005. **255**(2): p. 83-93.
- 686. Thomson, J.G., *Milieu therapy*. Bull Royal Coll Psychiatrists, 1986. 10: p. 35-36.
- 687. Bola, J.R. & Mosher, L.R., Treatment of acute psychosis without neuroleptics: two-year outcomes from the Soteria project. J Nerv Ment Dis, 2003. 191(4): p. 219-29.
- 688. Harder, S., Koester, A., Valbak, K., & Rosenbaum, B., Fiveyear follow-up of supportive psychodynamic psychotherapy in first-episode psychosis: long-term outcome in social functioning. Psychiatry, 2014. 77(2): p. 155-68.
- 689. Australian Health Minister's Advisory Council's National Mental Health Working Group, *National Standards for Mental Health Services*, 1997. Commonwealth Department of Health and Ageing: Canberra.
- 690. Renhard, R., Consumer participation in health care decision making in community-based settings and its relationship to health outcomes. 1998, Victorian Council for Quality Improvement and Community Accreditation: Melbourne.
- 691. National Mental Health Consumer and Carer Forum, Consumer and carer participation policy: a framework for the mental health sector, 2004. National Mental Health Consumer and Carer Forum: Canberra. 2004.
- 692. Tonin, V., Young people seeking mental-health care. Lancet, 2007. **369**(9569): p. 1239-40.
- 693. Mead, S., Defining peer support. Available from: parecovery. org/documents/DefiningPeerSupport_Mead. pdf, 2003.
- 694. Walker, G. & Bryant, W., Peer support in adult mental health services: a metasynthesis of qualitative findings. Psychiatr Rehabil J. 2013. 36(1): p. 28-34.
- 695. Repper, J. & Carter, T., A review of the literature on peer support in mental health services. J Ment Health, 2011. 20(4): p. 392-411.
- 696. Salzer, M.S. & Shear, S.L., Identifying consumer-provider benefits in evaluations of consumer-delivered services. Psychiatr Rehabil J, 2002. 25(3): p. 281-8.
- 697. Bracke, P., Christiaens, W. & Verhaeghe, M., Self-Esteem, Self-Efficacy, and the Balance of Peer Support Among Persons With Chronic Mental Health Problems. J Applied Soc Psychology, 2008. 38(2): p. 436-459.
- 698. Leggatt, M. & Woodhead, G., Family peer support work in an early intervention youth mental health service. Early Interv Psychiatry, 2015

- 699. Australian Bureau of Statistics, National Aboriginal and Torres Strait Islander social survey, Australian Bureau of Statistics, Editor. 2002: Melbourne.
- 700. Australian Bureau of Statistics and Australian Institute of health and Welfare, The health and welfare of Australia's Aboriginal and Torres Strait Islander Peoples, Australian Bureau of Statistics and Australian Institute of Health and Welfare, Editor. 2002: Canherra
- Thomson, N., Overview of Australian indigenous health, 2004. Australian Indigenous HealthInfoNet.
- 702. Hamilton, B., Blaszczynski. A., Dillon, A., Detection of at-risk mental states for pyschosis in young Aboriginal and non-Aboriginal people (DARMSPA), in Indigenous young people, crime and justice conference. 2009, Australian Institute of Criminology: Parramatta, Sydney.
- McDonald, C.R. & Steel, Z., Immigrants and mental health: an epidemiological analysis. 1997: Transcultural Mental Health Control
- 704. Miletic, T., Piu, M., Minas, H., Stankovska, M., Stolk, Y., & Klimidis, S., Guidelines for working effectively with interpreters in mental health settings. 2006: Victorian Transcultural Psychiatry Unit Melbourne.
- 705. Black Dog Institute. Information for Culturally and Linguistically Diverse Young People and their Families [cited 2016 02/02/2016]; Available from: http://www.blackdoginstitute. org.au/docs/CALDpaper.pdf.
- 706. Judd, F.K. & Humphreys, J.S., Mental health issues for rural and remote Australia. Aust J Rural Health, 2001. 9(5): p. 254-8.
- Morley, B., Pirkis, J., Naccarella, L., Kohn, F., Blashki, G., & Burgess, P., Improving access to and outcomes from mental health care in rural Australia. Aust J Rural Health, 2007. 15(5): p. 304-12.
- 708. Morley, B., Pirkis, J., Sanderson, K., Burgess, P., Kohn, F., Naccarella, L., & Blashki, G., Better outcomes in mental health care: impact of different models of psychological service provision on patient outcomes. Aust N Z J Psychiatry, 2007. 41(2): p. 142-9.
- 709. Welch, M. & Welch, T., Early psychosis in rural areas. Aust N Z J Psychiatry. 2007. 41(6): p. 485-94.
- 710. Humphreys, J., Hegney, D., Lipscombe, J., Gregory, G., & Chater, B., Whither rural health? Reviewing a decade of progress in rural health. Aust J Rural Health, 2002. 10(1): p. 2-14.
- 711. O'Keamey, R., Garland, G., Welch, M., Kanowski, L., & Fitzgerald, S., Factors predicting program fidelity and delivery of an early intervention program for first episode psychosis in rural Australia. Australian e-Journal for the Advancement of Mental Health, 2004. 3(2): p. 75-83.
- 712. Welch, M., Garland, G., The safe way to early intervention: an account of the SAFE (Southern Area First Episode) Project. Australasian Psychiatry, 2000. 8: p. 14.
- Tee, K., Ehmann, T.S. & MacEwan, G.W., Early psychosis identification and intervention. Psychiatr Serv, 2003. 54(4): p. 573
- 714. Butler, M., National Lesbian, Gay, Bisexual, Transgender and Intersex (LGBTI) ageing and aged care strategy, 2012. Australian Government Department of Health and Ageing: Canberra.
- Needham, B.L. & Austin, E.L., Sexual orientation, parental support, and health during the transition to young adulthood. J Youth Adolesc, 2010. 39(10): p. 1189-98.
- 716. Robinson, K.H., Denson, D., Davies, C., Bansel. P. Ovenden, G.,, Growing Up Queer: Issues Facing young Australians Who Are Gender Variant and Sexuality Diverse. 2014, Young and Well Cooperative Research Centre: Melbourne.

- 717. Smith, E., Jones, T., Ward, R., Dixon, J., Mitchell, A., & Hillier, L., From blues to rainbows: The mental health and well-being of gender diverse and transgender young people in Australia, 2014. La Trobe University.
- 718. Rosenstreich, G., *Discrimination, LGBTI Mental Health and Suicide.*Australian Journal on Psychosocial Rehabilitation, 2011. p. 16-19.
- 719. Ray, N. & Berger, C., Lesbian, gay, bisexual and transgender youth: An epidemic of homelessness, 2007. National Gay and Lesbian Task Force Policy Institute.
- 720. McNeil, J., Bailey, L., Ellis, S., Morton, J., & Regan, M., Trans Mental Health Study, Edinburgh, Scottish Transgender Alliance, 2012.
- 721. Cochran, B.N., Stewart, A.J., Ginzler, J.A., & Cauce, A.M., Challenges faced by homeless sexual minorities: comparison of gay, lesbian, bisexual, and transgender homeless adolescents with their heterosexual counterparts. Am J Public Health, 2002. 92(5): p. 773-7
- 722. Leonard, W., Pitts, M., Mitchell, A., Lyons, A., Smith, A., Patel, S., Couch, M., Barrett, A., Private Lives 2: The second national survey of the health and wellbeing of gay, lesbian, bisexual and transgender (GLBT) Australians. The Australian Research Centre in Sex, Health & Society, 2012. La Trobe University: Monograph Series Number 86. Melbourne.
- 723. Chakraborty, A., McManus, S., Brugha, T.S., Bebbington, P., & King, M., Mental health of the non-heterosexual population of England. Royal College of Psychiatrists, 2011. 198: p. 143-148.
- 724. Bolton, S.-L. & Sareen, J., Sexual orientation and its relation to mental disorders and suicide attempts: findings from a nationally representative sample. Can J Psychiatry, 2011. 56(1): p. 35-43.
- 725. Ryan, C., Russell, S.T., Huebner, D., Diaz, R., & Sanchez, J., Family acceptance in adolescence and the health of LGBT young adults. J Child Adolesc Psychiatr Nurs, 2010. 23(4): p. 205-13.
- 726. Meyer, I.H., Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. Psychol Bull, 2003. 129(5): p. 674-97.
- 727. Gevonden, M.J., Selten, J.P., Myin-Germeys, I., de Graaf, R., ten Have, M., van Dorsselaer, S., ... Veling, W., Sexual minority status and psychotic symptoms: findings from the Netherlands Mental Health Survey and Incidence Studies (NEMESIS). Psychol Med, 2014. 44(2): p. 421-33.
- 728. Edidin, J.P., Ganim, Z., Hunter, S.J., & Karnik, N.S., The mental and physical health of homeless youth: a literature review. Child Psychiatry Hum Dev, 2012. 43(3): p. 354-75.

- 729. Flatau, P., Thielking, M., MacKenzie, D., & Steen, A., The cost of youth homelessness in Australia study: snapshot report 1. 2015: Swinburne University of Technology.
- 730. Killackey, E.J., Home: A key part of functional recovery for young people with psychotic illness. Parity 2013. **26**(3): p. 6.
- Whitbeck, L., Mental health and emerging adulthood among homeless young people. [electronic resource]. 2011: Hoboken: Taylor and Francis.
- 732. Muir-Cochrane, E., Fereday, J., Jureidini, J., Drummond, A., & Darbyshire, P., Self-management of medication for mental health problems by homeless young people. Int J Ment Health Nurs, 2006. 15(3): p. 163-70.
- 733. Hodgson, K.J., Shelton, K.H. & Bree, M., Psychopathology among young homeless people: longitudinal mental health outcomes for different subgroups. Br J Clin Psychol, 2015. 54(3): p. 307-325.
- 734. Thomson, L., McArthur, M., Humphries, P., & Barker, J., Effective interventions for working with young people who are homeless or at risk of homelessness. 2012, Canberra: Department of Families, Housing, Community Services and Indigenous Affairs.
- 735. Roy, L., Rousseau, J., Fortier, P., & Mottard, J.P., Housing and home-leaving experiences of young adults with psychotic disorders: a comparative qualitative study. Community Ment Health J, 2013. 49(5): p. 515-27.
- 736. Johnson, G. & Chamberlain, C., Are the homeless mentally ill? Australian Journal of Social Issues, 2011(1): p. 29.
- Mayock, P., Corr, M.L. & O'Sullivan, E., Homeless young people, families and change: family support as a facilitator to exiting homelessness. Child & Family Social Work, 2011. 16(4): p. 391-401
- 738. Onwumere, J., Bebbington, P. & Kuipers, E., Family interventions in early psychosis: specificity and effectiveness. Epidem Psychiatric Sci, 2011. 20(02): p. 113-119.
- 739. Markulev, C., McGorry, P.D., Nelson, B., Yuen, H.P., Schaefer, M., Yung, A.R., Amminger, G.P., (2015). NEURAPRO-E study protocol: a multicentre randomized control trial of omega-3 fatty acids and cognitive-behavioural case management for patients at ultra high risk of schizophrenia and other psychotic disorders. Early Intervn Psychiatry, 2015 Aug 16 doc:10.1111/eip.12260



