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National Youth Mental Health Foundation

Evidence Summary: Identification of young people at risk of developing psychosis

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Overview

Over the past 20 years, in conjunction with the development of new models of care for treating psychotic disorders in young people, a series of studies have focussed on the prevention of psychotic disorders. This body of work has involved the identification of specific risk factors for the onset of psychosis, the development of criteria to identify those most at risk of developing a psychotic disorder, and the testing of interventions designed to ameliorate, delay or prevent the onset of psychosis. This summary focuses on identification and assessment, describing the criteria most commonly used to identify young people who are at increased risk of developing a psychotic disorder.

Identifying those most at risk of developing a psychotic disorder

In order to prevent, delay or ameliorate the onset of a psychotic disorder, efforts have been made to identify young people at high clinical risk of developing a psychotic disorder. Although a number of approaches have been taken, all published studies to date can be categorised as using basic symptoms criteria (see 'Key terms'), UHR criteria (see below) or a combination of both.

Three measures have been used to assess UHR features: the Comprehensive Assessment of At-Risk Mental States (CAARMS; 2), the Structured Interview for Prodromal Syndromes (SIPS; 3), and the Basel Screening Instrument for Psychosis (4). However, the CAARMS has been validated with young Australians and is the most commonly used instrument locally, and thus is summarised here (see right). A full, operationalised version of the UHR Criteria and CAARMS are described elsewhere (5).

It is recommended that clinicians are trained in administering the CAARMS before assessing psychosis risk, either through their headspace centre or through a training organisation.

The Ultra-High Risk (UHR) Criteria

To meet UHR Criteria, clients must meet one of two impaired functioning criteria, experiencing either:

- A 30% or greater drop in functioning from a premorbid level, sustained for one month, occurring within past 12 months or,
- Chronically low functioning for the past 12 months or longer, and meet criteria for at least one of the following groups:

Group 1: Vulnerability Group

Family history of psychosis in first degree relative or Schizotypal Personality Disorder is identified in the young person.

Group 2: Attenuated Psychosis Group

Individuals with sub-threshold (intensity or frequency) positive psychotic symptoms (as assessed with the CAARMS). The symptoms, along with a decline in functioning, must have been present in the past year.

Group 3: Brief Limited Intermittent Psychosis Syndrome (BLIPS) Group

Those who have experienced episodes of frank psychotic symptoms within the past year that have not lasted longer than a week and have spontaneously remitted (ie. without treatment).

NB: It is possible for the same person to meet criteria for more than one group.

Key terms

Prodrome: The period directly before the onset of full-threshold or frank psychosis where noticeable changes occur (e.g. attenuated psychotic symptoms, decline in functioning). Most psychotic episodes will be preceded by a prodromal period, however the nature and length may vary for each individual and episode. A prodromal period can only be identified retrospectively once the onset of psychosis has occurred.

Transition: The point at which an individual is considered to have 'transitioned' or 'converted' to full-threshold psychosis from a prodromal state. Also termed 'conversion'.

Ultra-High Risk (UHR): A term used in reference to those meeting the criteria to identify individuals considered to be at 'ultra-high risk' of developing psychosis. While the majority of people who meet the UHR criteria will not go on to develop a psychotic disorder (see 'transition rates' below), their risk is considerably higher than that of the general population.

At-risk mental state (ARMS): A term describing the clinical features/symptoms (beyond genetics and symptoms alone) associated with a possible psychotic prodrome, indicating that they are at an increased chance of developing a psychotic disorder. This term describes an increased risk while acknowledging that the person may or may not transition to psychosis. The Comprehensive Assessment of At Risk Mental States (CAARMS, described below) is the dominant method of assessing ARMS.

Basic symptoms approach: This approach focuses on anomalies of subjective experience as markers of psychosis risk (1). These 'basic symptoms' refer to subjective experiences of abnormalities in cognition, attention, perception, and movement and can be assessed with the Schizophrenia Proneness Instrument, Adult Version (SPIA) or the Bonn Scale for the Assessment of Basic Symptoms (BSABS).

The Comprehensive Assessment of At-Risk Mental States (CAARMS)

The CAARMS is the most commonly used instrument to assess the UHR criteria locally. The full version of the CAARMS includes seven domains with corresponding subscales:

1: Positive symptoms
Unusual thought content; Non-bizarre ideas; Perceptual abnormalities; Disorganised speech

2: Cognitive change (attention/concentration)
Subjective experience; Observed cognitive change

3: Emotional disturbance
Subjective emotional disturbance; Observed blunted affect; Observed inappropriate affect

4: Negative symptoms
Alogia; Avolition/apathy; Anhedonia

5: Behavioural change
Social isolation; Impaired role functioning; Disorganising/odd/ stigmatising behaviour; Aggression/ dangerous behaviour

6: Motor/physical changes
Subjective complaints of impaired motor functioning; Informant reported or observed changes in motor functioning; Subjective complaints of impaired bodily sensation; Subjective complaints of impaired autonomic functioning

7: General psychopathology
Mania; Depression; Suicidality and self harm; Mood swings/ lability; Anxiety; Obsessive-compulsive disorder symptoms; Dissociative symptoms; Impaired tolerance to normal stress

Tips for assessment of psychosis risk

- **During the assessment, state the purpose of each section.** For example, when asking questions about the client's mood, state "I am going to ask some questions about your mood now" or in assessing attenuated psychotic symptoms, "Now I am going to ask you about some unusual thinking or strange experiences you may or may not have had". Indicate that it is part of a standard assessment to ask about experiences that may seem unusual.
- **Normalise and demystify psychotic-like symptoms.** Clients may become concerned during the assessment that their experiences are abnormal, especially during the assessment of attenuated psychotic symptoms. Depending on the clinical significance of their response (i.e., see assessment of frequency, duration and distress below), it is important to reassure clients that the experience of psychotic-like symptoms are reasonably common in the general population (9), especially in adolescence (10), and may not require treatment. However, if you believe the client is reporting clinically significant attenuated psychotic symptoms, you can also reassure them that there are effective treatments available and getting treatment early can help prevent them getting worse.
- **Explore the relationship of psychotic symptoms with other symptoms.** Engage in questions about how psychotic symptoms may vary depending on mood, anxiety, stress, patterns of behaviour and/or substance use.
- **Enquire about the frequency, duration, and associated distress of psychotic symptoms.** Regardless of the assessment tools or approach used, engage in a discussion of the young person's psychotic symptoms that allows you to determine how frequently these are occurring, in what contexts, how long the symptoms last and how distressing or upsetting the young person find these experiences to be. Again, provide reassurance around the benefits of effective and early treatments.
- **A discussion of psychosis risk should occur throughout the assessment.** This should be based on the available evidence on the risk of developing psychosis, but also meet the comprehension needs of the individual. Where possible, different formats and modes of delivery (e.g., written text, online resources, visual diagrams, etc.) should be used according to the preferences of the young person.
- **Engage in ongoing assessment of symptoms.** Assessment should be an ongoing process that is not confined to initial entry to service. It is important to make sure you check in with the young person about attenuated psychotic symptoms previously assessed, and also enquire about the onset of any additional symptoms. Greater accuracy in identifying attenuated psychotic symptoms may be achieved after a number of sessions, depending on a person's level of engagement. Treatment should then be tailored accordingly. Review of attenuated symptoms should become part of routine care in order to accurately monitor symptom fluctuation, including improvements.
- **Psychosis risk assessment focuses both on the intensity and frequency of symptoms over time.** Therefore it is important not only to assess the severity of symptoms but also to explore the on- and- offset dates of symptoms in detail to assess psychosis risk.

Transition Rates

A 2012 meta-analysis indicated that 22% of those at UHR developed psychosis after 1 year, 29% after 2 years, and 36% after 3 years (6). However, more recent research has indicated a decline in transition rates (eg. (7)), with estimates of transition between 10 and 18% at one year. Proposed causes for this decline in transition rate include more effective treatment as usual, earlier identification and referral of those identified as UHR, or a dilution effect due to an increase in false-positives (8). It is important to remember, however, that even with an estimated 12-month transition rate at the lowest rate of 10%, UHR clients are still at significantly higher risk of psychosis than the general population. Given these complexities, the importance of ethical considerations is paramount.

Ethical considerations about assessment

The CAARMS was not designed for use as a general screening tool and transition rates based on UHR criteria are from targeted, distressed and help-seeking populations, rather than the general population. Psychoeducation for young people meeting the UHR criteria needs to include information about how to reduce the likelihood of developing a psychotic disorder, but also promote optimism about the chances of avoiding this outcome, particularly with the provision of appropriate treatment (see Evidence Summary: Treatment of young people at risk of developing psychosis).

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Acknowledgements

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Authors

Dr Magenta Simmons
Ms Alice Montague
Dr Alexandra Parker

Clinical Consultants

Assoc Prof Barnaby Nelson
Dr Miriam Schaefer
Dr Simon Rice
Orygen Youth Health Clinical Program
Dr Steve Leicester
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National Office

p +61 3 9027 0100 **f** +61 3 9027 0199
info@headspace.org.au
headspace.org.au