Early intervention approaches for
high prevalence and high risk
child psychiatric disorders

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Outline of presentation

1. Early intervention: definition
2. High prevalence and high risk child psychiatric disorders: definition
3. Screening: an approach
4. School-based programs: an approach
5. Specialist clinics: justification
6. Specialist clinics: assessment, treatment, monitoring of treatment approaches
<table>
<thead>
<tr>
<th>Type of prevention / intervention</th>
<th>Definition</th>
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<tr>
<td>Universal</td>
<td>targeted- whole population group</td>
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<tr>
<td>Selective</td>
<td>targeted- individuals-significantly increased imminent or lifetime risk</td>
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<tr>
<td>*Indicated</td>
<td>targeted- individuals-minimal but detectable signs or biological markers indicating predisposition to mental disorder</td>
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Early intervention: summary

Screening

School-based parent management and social skills programs

Specialist clinics

Discharged into primary care setting
[2] High prevalence and high risk child psychiatric disorders

1. ADHD, combined type
2. Oppositional defiant disorder/Conduct disorder
3. Dysthymic disorder: pre-puberty / Major depressive disorder: post-puberty

Low prevalence but very high risk child psychiatric disorders

4. Psychotic disorders:
   schizophrenia-undifferentiated type;
   disorganised type: pre-puberty

   schizophrenia-paranoid type
   bipolar disorder with psychotic features
   major depressive disorder with psychotic features: post-puberty
-diagnostic categories that allow us to focus on those children that require special assistance

-these children have multiple problems that impair their development in home, school (academic) and social settings

-the clinician must assess these problems at individual, interpersonal, family and social levels and gain an equivalent understanding of their strengths and resilience factors as a person.
DSM-IV CRITERIA

Attention Deficit Hyperactivity Disorder, combined type (ADHD-CT)

-six or more symptoms, at least six months, maladaptive/inconsistent with developmental level

-inattention dimension and hyperactivity-impulsivity dimension

-evident of at least two settings

-onset before seven years of age

-impairment social, academic, occupational functioning

-symptoms not due to a PDD, Psychotic, Mood, or Anxiety Disorder

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DSM-IV CRITERIA
Oppositional defiant disorder

-a recurrent pattern of negativistic, defiant, and hostile behaviour

-onset usually before 7 years of age

-usually first emerges in the home setting

-always a precursor for Conduct disorder (approximately 2%-3% of children with ODD develop CD)
DSM-IV CRITERIA
Conduct disorder
-repetitive and persistent pattern of behaviour in which the basic rights of others and/or major age-appropriate norms or rules are violated, evidenced by three or more of the following criteria within the previous 12 months, with at least one criterion present in the past 6 months:

Aggression/Cruelty towards people and/or animals
Destruction of property
Theft
Serious violations of social rules/norms

-behaviours are clinically impairing in the domains of social, academic or occupational functioning

->/= 18 years of age, criteria for antisocial personality disorder not met
DSM-IV CRITERIA

Dysthymic disorder is characterized by the following:
  1 year or more (most of the day, for more days than not),
  <2 months absence in a given year
-depressed and/or irritable mood predominant
-2 or more of the following:
  feelings of hopelessness, low self-esteem
  appetite change, in/hyper somnia, anergia (fatigue),
  decreased concentration or decisiveness
no major depressive episode evident in first year of the symptoms
symptoms cause impairment in interpersonal, social, academic,
  occupational functioning
not due to a substance, medical condition or bereavement
DSM-IV CRITERIA

Major depressive disorder – one or more major depressive episode(s) characterized by the following:

*period of two weeks or more*
- depressed and/or irritable mood predominant and/or
- loss of interest or pleasure
- 3 or 4 or more of the following:
  - feelings of worthlessness or excessive or inappropriate guilt,
  - >5% weight change in a given month, in/hyper somnia, psychomotor agitation/retardation, anergia (fatigue),
  - decreased concentration or ability to think or decisiveness, recurrent thoughts of death, suicidal ideation, suicide plan or suicide attempt

*symptoms cause impairment in interpersonal, social, academic, occupational functioning*

*not due to a substance, medical condition or bereavement*
DSM-IV CRITERIA

Schizophrenia- undifferentiated type:
  two or more of
delusions, hallucinations, disorganised speech,
grossly disorganised/ catatonic behaviour, negative symptoms
present for 6 months or more

symptoms not met for paranoid/disorganised/catatonic type

if a PDD present, delusions or hallucinations present for
one month or more

*symptoms cause impairment in interpersonal, social, academic,
occupational functioning
not due to a substance or medical condition*
DSM-IV CRITERIA

Schizophrenia- disorganised type:
  two or more of
delusions, hallucinations, disorganised speech,
grossly disorganised/ catatonic behaviour, negative symptoms
present for 6 months or more

prominent disorganised speech, disorganised behaviour,
flat or inappropriate affect

if a PDD present, delusions or hallucinations present for
one month or more

symptoms cause impairment in interpersonal, social, academic,
occupational functioning
not due to a substance or medical condition
DSM-IV CRITERIA

Schizophrenia- paranoid type:
   two or more of
delusions, hallucinations, disorganised speech,
grossly disorganised/ catatonic behaviour, negative symptoms
present for 6 months or more

preoccupation with one or more delusions
or frequent hallucinations

if a PDD present, delusions or hallucinations present for
one month or more

symptoms cause impairment in interpersonal, social, academic,
occupational functioning
not due to a substance or medical condition

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DSM-IV CRITERIA
Bipolar I disorder:
manic episode(s) with/without major depressive episodes, mixed episodes

Bipolar II disorder:
hypomanic episode(s) with/without major depressive episodes

(hypo)manic episode:
(four days) one week or more abnormally and persistently elevated, expansive or irritable mood and 3 or more of grandiosity, decreased need for sleep, pressure to talk, racing thoughts, distractibility, increased goal directed activity, excessive involvement subjectively pleasurable activities

*symptoms cause impairment in interpersonal, social, academic, occupational functioning*

*not due to a substance or medical condition*

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Screening: an approach

Key principles:

1. the above high prevalence/high risk and low prevalence/very high risk conditions share common risk factors:

   - hyperactivity/impulsiveness
   - mood dysregulation
   - arousal dysregulation
   - language based learning difficulties

*the above separately may or may not be at a ‘disorder’ level of severity
2. Multi-informant assessment:
   - parent perspective, child perspective, teacher perspective, clinician/other perspective
   - concordance between perspectives can be low
   - parental attitudes towards, understanding of a given child’s symptoms and behaviour are crucial to the priorities of the treatment plan at any given time

3. Family context:
   - family system’s flexibility and adaptiveness to change within the life cycle
4. Developmental context:
   - the social and cultural forces that shape
     the nature and strength of the interpersonal
     links between a given child and their
     family members and school peer group/
     teachers need to be considered in the
     assessment

5. Comorbid developmental vulnerabilities
   - visuospatial learning difficulties
   - fine/gross motor coordination difficulties
Screening—an approach at a primary care level, for example at a school classroom level

**Strengths and Difficulties Questionnaire (SDQ)** (Goodman, 1997)

- brief behavioural screening questionnaire that can be completed by parents and teachers of 4-16 year old children and by 11-16 year old children themselves

- emotional symptoms, hyperactivity, conduct problems, and peer problems scales are summed to give a total difficulties score; also, a prosocial scale is formed

- hyperactivity/impulsiveness; mood dysregulation; arousal dysregulation vulnerabilities can be identified
[B] School teacher questionnaire about
- spelling, arithmetic, reading abilities being
  above average/average/below average for
  a given child’s age and gender

-language based learning difficulties can then be assessed formally
  using the
Wide Range Achievement Test (WRAT) (Jastak & Wilkinson, 1984)

- 20 minutes to complete / supervised by an educational psychologist

-scaled score for spelling, arithmetic and reading with normative data
  available

-language-based learning difficulties:
  increased 1:1 teaching
  increased home-based tutoring
  increased after-school structured homework groups

-parent management programs and social skills programs

-examples:
  Parenting for Success Program and Social Skills for Success Program
Parenting for Success Program

An eight session group program for the parents of:

- primary school age children with
  - hyperactivity/impulsiveness
  - mood dysregulation
  - arousal dysregulation

- considered by their teachers to be educationally underachieving as a result of the above

- referred by their teacher to the program

- run in the primary school

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Parenting for Success program:

- run for 2-3 hours on a weekday evening in a local primary school

- all the children are referred from this primary school

- primary aim: to change parent’s response to their child’s behaviour

  # pro-social behaviour consistently rewarded

  # anti-social behaviour systematically ignored and for severe anti-social behaviour linked to structured time away from the family group

- topics covered: active listening, strategic ignoring, quality time, empathy skills, perspective taking, problem specification and solution generation, effective monitoring of behaviour

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Parenting for Success Program: outline of topics to be considered

- rationale for the course
- parents as trainers for their children
- why children misbehave - ‘causes’ of defiant behaviour
- paying attention to positive behaviour and compliance
- using strategic ignoring
- active listening
- monitoring behaviour
- resolving conflict and problem solving
- family communication
- aiming for time out; using response cost
- helping children cope with their emotions
- learning how to make and keep friends
- teaching skills of empathy and perspective taking
- improving school behaviour from home
- anticipating future problems

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Social Skills for Success program

An eight session social skills group program for:

- primary school age children with
  - hyperactivity/impulsiveness
  - mood dysregulation
  - arousal dysregulation

- considered by their teachers to be educationally underachieving as a result of the above

- referred by their teacher to the program

- program run within the school curriculum

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Social Skills for Success program:

-run for 1 hour on a weekday morning in local primary school

-all the children were referred from this primary school

-primary aim: to change children’s interpersonal responses to their siblings and peer group to facilitate making and keeping friends

#pro-social behaviour steps explained, practised and modelled by the group

#active listening, perspective taking, active monitoring of interpersonal behaviour, empathy skills, problem specification and solution generation covered

#positive and negative reinforcement strategies modelled
Social Skills for Success Program: outline of topics to be considered

- rationale for the course
- children as trainers for themselves and each other
- making and keeping friends: two different processes
- why children have trouble—‘causes’ of ‘no friends’
- paying attention to others’ behaviour
- getting along: using active listening and strategic ignoring
- monitoring your own behaviour and others’ behaviour
- resolving conflict and problem solving
- coping with strong feelings in yourself and others
- empathy skills and perspective taking
- family communication
- getting along better at home with brothers and sisters
- anticipating future problems

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Specialist Clinics in General Medical Settings

Influenza:
1918-1919 pandemic (20,000 dead in Australia) led to a specialist clinic in which all local hospital staff had venous blood serum collected to ascertain the nature of their influenza antibodies. In 1931, Shope and Lewis identified the same antibody response from pigs in Iowa which was termed the ‘swine influenza’ virus.
Influenza (continued):
In 1940 a specialist clinic of innoculation of virus grown in amniotic fluid of the chick embryo in 15 medical staff associated with Burnet. Antibody level analysis revealed the threshold phenomenon for clinical/subclinical infection with a given form of influenza virus.
In 1942 a nasal spray vaccination programme of Australian Servicemen occurred with significant success.

Penicillin:
Fleming’s initial description and Florey’s subsequent elucidation of the chemical nature of penicillin involved numerous specialist clinics with hospital surgical and medical patients and later war wounded patients. It should be noted that the vast majority of people who died in the 1918-1919 pandemic of influenza virus died from secondary bacterial pneumonia.

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Specialist Clinics in General Psychiatry Settings

Cade as a prisoner of war noted the ‘disease quality of mental illness’ Medical Superintendent Bundoora Repatriation Hospital. He began injecting urine of schizophrenic and manic patients into the abdomen of guinea pigs followed by investigation of specific components of urine which led to the injection of lithium urate as a soluble form of uric acid which is relatively insoluble. ‘After a period of two hours the animals although fully conscious became unresponsive to stimuli [with an absence of their characteristic startle response sic]’. A fortnight’s self-administration followed after which Cade gave the lithium urate to 19 patients-10 with mania, 6 with schizophrenia, 3 with psychotic depression. It had minimal effect on the latter group slight calming effect on the middle group and an extraordinary effect on the manic group. Schou subsequently systematically investigated lithium’s benefits and adverse-effects.

Specialist Clinics in Child Psychiatry Settings

In 1937, Bradley published the findings of their investigation of children with hyperactivity using pneumoencephalography. The most adverse feature of the procedure was headache, which was treated with benzedrine, an amphetamine psychostimulant. Subsequently, some hyperactive children had noted improvement in their behavior and school performance along with a rise in intelligence scores for some of these children.

In 1943, Kanner described 11 children with ‘an inability to relate themselves in the ordinary way to people and situations from the beginning of life’. Other features included an inability to use language to communicate, an obsessive anxious focus on maintaining sameness, an excessive focus on objects and/or pictures, and good cognitive potential in contrast to childhood onset schizophrenia.

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Primary Aims:

1. to integrate a clinical research program within child and adolescent mental health services (CAMHS)

2. to facilitate qualitative and quantitative research aims and hypotheses arising from
   [a] clinical dilemmas,
   [b] dilemmas in service delivery, and
   [c] dilemmas about developing policy about service delivery

3. to ensure an ongoing direct interface between clinical and research practice
Referral

-referral criteria are relevant for CAMHS clinicians

-based on current clinical management problems

-inclusion criteria:
[1] diagnostic uncertainties about high prevalence/high risk disorders
[2] psychological and/or medication treatment non-responsiveness

-exclusion criteria are those disorders for which specialist clinics already exist: intellectual disability, neurological disorder

-referral forms are easy and quick to complete and a child psychiatrist/senior psychologist receive the referral to ensure rapid and accurate processing of the referral

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Referral form-outline

-case manager, date of referral, other staff involved in the case
-name, UR, age/dob, address, phone number, school, year
-family constellation
-presenting problems
-brief diagnostic formulation
-diagnosis
-contact with case to date (categorical options given of assessment, treatment modalities, psychology/educational/speech therapy/occupational therapy assessment and/or treatment, monitoring of progress
-questions to be addressed by this referral
Assessment-quantitative aspects

-a child psychiatrist and senior psychologist work together to complete the essential components of the assessment
-trainees in psychiatry, PhD and Masters level students can be trained to complete aspects of the assessment
-post-referral, an explanatory letter with an informed consent form is completed along with parent-report symptom scales
-the initial interview involves the child psychologist completing standardised assessments of intelligence (V/P/FSIQ) and spelling, reading and arithmetic while the child psychiatrist completes a semi-structured diagnostic assessment along with demographic and developmental measures. Parental symptomatology, marital and family functioning are assessed by parent report.
-subsequent interview involves a semi-structured diagnostic assessment of the child along with child-report of anxiety/depressive symptoms and completion of the psychometric tests
Assessment-qualitative aspects

-a tape-recording and thematic notes are made of all sessions with the child and parent to allow themes in informal play or verbal and/or nonverbal communication to be noted

Assessment-neuropsychological aspects

-nonverbal computer-based executive function tasks are used, given the high rate of language-based learning difficulties in children with

[1] diagnostic uncertainties about high prevalence/high risk disorders
[2] psychological and/or medication treatment non-responsiveness
Clinician feedback  
- oral and written feedback in the form of a single report is given in a formal clinical review meeting held from 1000-1100 hours on Monday each week  
- the referring clinician outlines their formulation of the diagnosis, current clinical management issues and psychological and medication interventions already attempted  
- the quantitative and qualitative data from the specialist clinic are then presented by members of the clinic involved in the assessment process and an agreed current formulation is reached and the short- and longer-term management priorities and specific strategies are discussed. Specific interventions are determined and specific outcome goals are stated  

Child and Parent feedback  
- with case manager permission, a member of the specialist clinic team meets with the child and parent(s) together and separately to clearly go through the current formulation/specific treatment strategies and outcome goals
Monitoring process

-specialist clinic team members are available to monitor the response to these interventions and to help manage ongoing prioritisation of clinical problems and determination of specific interventions
-case managers and young people and/or their parents can contact specialist clinic team members in consultation with their case manager
-a three monthly telephone interview with each child and/or their parent(s) about their experience of the specialist clinic is completed to ensure their views shape the ongoing structure and function of the clinic
-a six monthly review questionnaire is distributed to all CAMHS clinicians to obtain their views to also shape the ongoing structure and function of the clinic
-12 month specialist clinic reassessment occurs for every case
A concluding question….

Can we not have specialist clinics and

-systematically develop

-comprehensively develop

-knowingly develop

-control the development of

our field,

given bio-psycho-social-cultural-developmental-political

and –economic domains?

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Early intervention: summary

Screening

School-based parent management and social skills programs

Specialist clinics

Discharged into primary care setting
"All right, Billy, you just go right ahead! . . . I've warned you enough times about playing under the anvil tree!"
“Hello, Emily. This is Gladys Murphy up the street. Fine, thanks . . . Say, could you go to your window and describe what's in my front yard?”
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Calvin and Hobbes

OH NO! EVERYTHING HAS SUDENLY TURNED NEO-CUBIST.

IT ALL STARTED WHEN CALVIN ENGAGED HIS DAD IN A MINOR DEBATE. SOON CALVIN COULD SEE BOTH SIDES OF THE ISSUE. THEN POOR CALVIN BEGAN TO SEE BOTH SIDES OF EVERYTHING!

THE TRADITIONAL SINGLE VIEWPOINT HAS BEEN ABANDONED! PERSPECTIVE HAS BEEN FRACURED!

THE MULTIPLE VIEWS PROVIDE TOO MUCH INFORMATION! IT'S IMPOSSIBLE TO MAKE! CALVIN QUICKLY TRIES TO ELIMINATE ALL BUT ONE PERSPECTIVE!

IT WORKS! THE WORLD FALLS INTO A RECOGNIZABLE ORDER!

YOU'RE STILL WRONG, DAD.

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