

Autism Spectrum Disorder: clinical challenges and treatment considerations

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Faculty/Presenter Disclosure

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Disclosure of Commercial Support

- This program has not received financial support
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- **Potential for conflict(s) of interest:**
 - There is no conflict of interest related to the presentation.

Mitigating Potential Bias

Potential bias is not anticipated as there is no conflict of interest identified in the previous slides.

Learning objectives:

- Describe the current clinical challenges in Autism Spectrum Disorder
- Discuss common mental health comorbidities and treatment issues in Autism spectrum Disorder in adults

DSM-5 Diagnostic Criteria for ASD

- A. *Persistent deficits in **social communication and social interaction***
 - 1. Deficits in **social-emotional reciprocity**
 - 2. Deficits in **nonverbal communicative** behavior in social interaction
 - 3. Deficits in developing and maintaining **relationships**

- B. ***Restricted, repetitive patterns of behavior, interests, or activities**: at least two of the following:*
 - 1. Stereotyped or **repetitive speech, motor** movements, or use of objects
 - 2. Excessive adherence to **routines/rituals**, or resistance to change
 - 3. Highly **restricted, fixated interests** that are abnormal in intensity or focus;
 - 4. Hyper-or hypo-reactivity to **sensory** input or unusual interest in sensory aspects of environment

- C. *Symptoms in early childhood*
- D. *Symptoms together limit and impair everyday functioning*

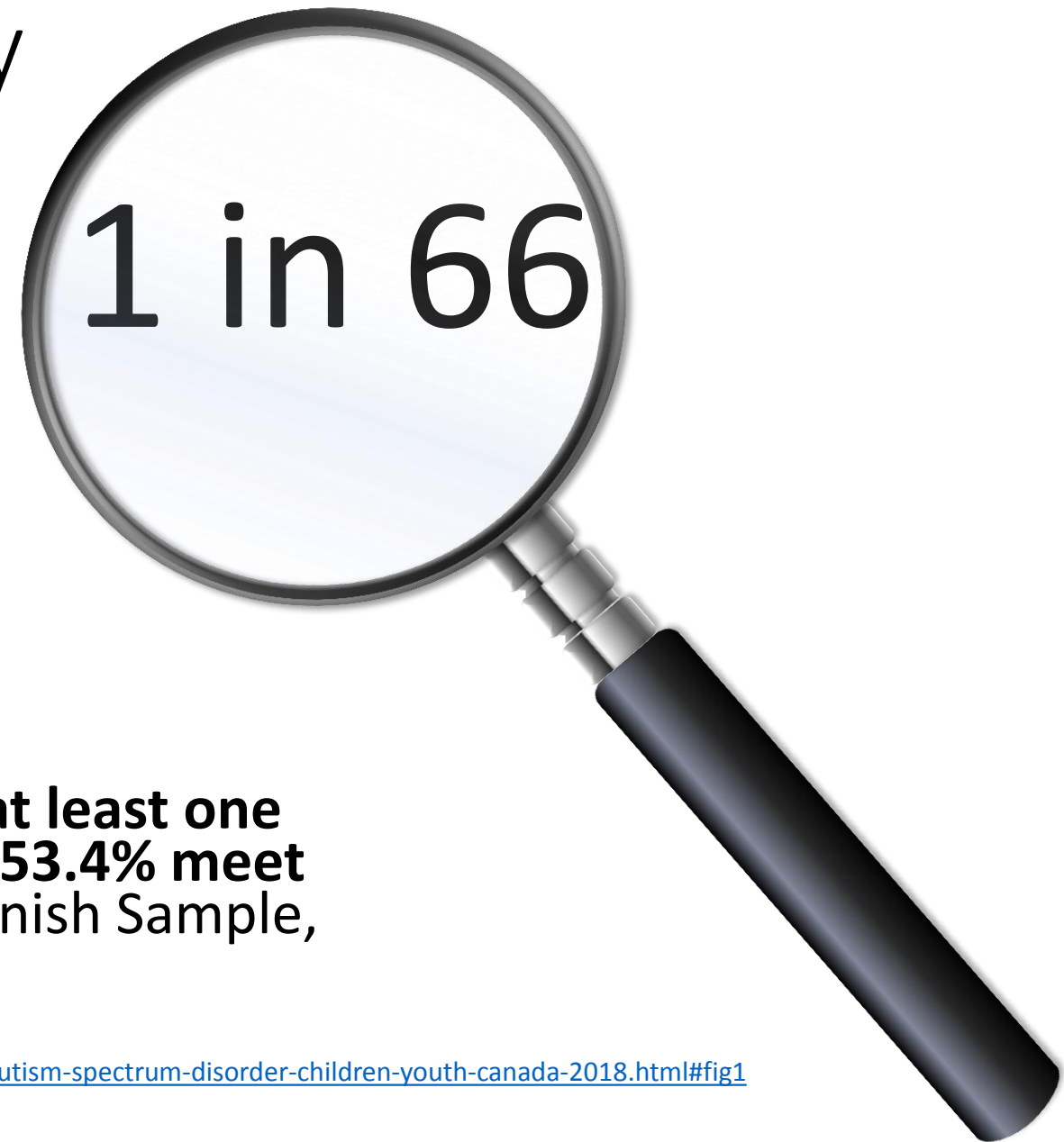
What do the numbers say

1966: 4.5 per 10,000 [UK]

2000: 1 in 150

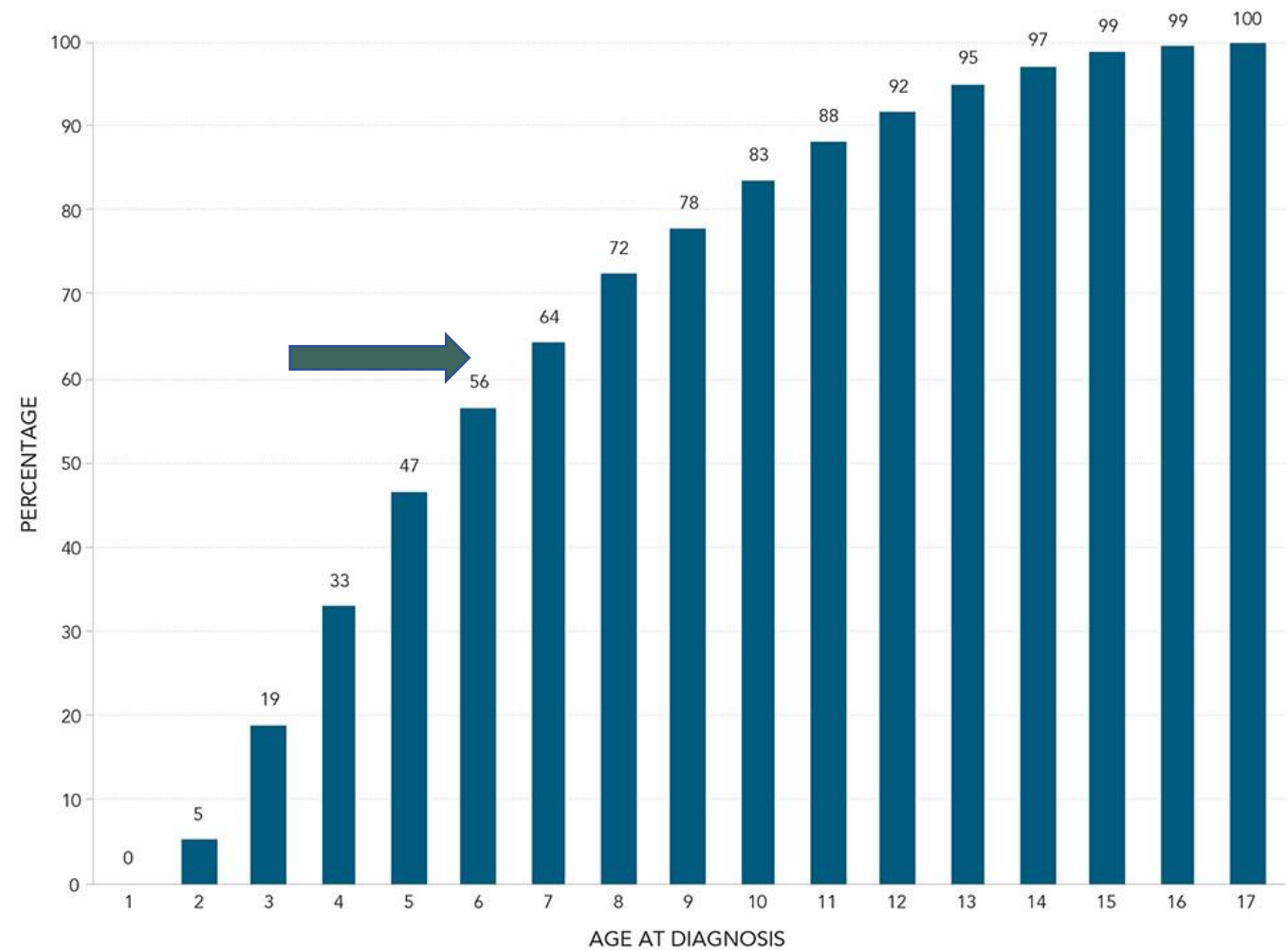
2010: 1 in 68

2014: 1 in 59



72.5% of young people with ASD have at least one mental health comorbidity, and almost 53.4% meet the criteria for more than one (large Danish Sample, Abdallah et al., 2011)

National Autism Spectrum Disorder Surveillance
System
The cumulative percentage of 5–17 year olds with
ASD by age of diagnosis, 2015



ASD and gender



Male–female ratio for autism prevalence **4–5:1**



Under-recognition of females
(particularly higher-functioning)
Issues of diagnostic instruments
Ascertainment bias

Characteristics more often present in females than in males



Social interaction

Greater awareness of the need for social interaction

Desire to interact with others

Passivity (a “loner”), often perceived as “just being shy”

Tendency to imitate others (copy, mimic, or mask)

Characteristics more often present in females than in males

Communication

Better linguistic abilities developmentally

Better imagination

Restricted, repetitive patterns of behavior, interests, or activities

People/animals rather than objects/things

(e.g., animals, soap operas, celebrities, pop music, fashion, horses, pets, and literature)



Characteristics more often present in females than in males



Others

Tendency to be perfectionistic, very determined

Tendency to be controlling (in play with peers)

High (passive) demand avoidance

Tendency to have episodes of eating problems

ASD Health Watch Table

Early identification of symptoms (developmental screening, ASD specific screening)

Clinical encounter

Medical assessment and evaluation

Mental health and behavioural assessment

Psychopharmacological interventions

Health Watch Table – Autism Spectrum Disorder (ASD)

Bradley, Loh, Grier, Korossy and Cameron 2014

This ASD Health Watch Table (HWT) is a tool to assist primary care providers (general practitioners, family physicians, nurses, and nurse practitioners) in improving the primary care of their patients with autism spectrum disorder (ASD). The tool was developed within the Developmental Disabilities Primary Care Initiative (DDPCI).

This ASD tool, like the other DDPCI HWTs, is intended to summarize outlooks in a manner enabling busy primary health care providers to undertake responsible health measures without an unduly time-consuming requirement of having to review in detail and compare the multiple texts concerned. It reflects a broad consensus in extensive published texts by specialists in the spheres under consideration. It includes concerns applicable to the life span from childhood through to adulthood, but unlike the other DDPCI tools which focus on those with DD, this HWT covers all abilities and severity of ASD.

The recommendations are not meant to impose a rigid formula as to what must be done and when, irrespective of the primary health care provider's judgment as to what is judicious and reasonable in given circumstances. Furthermore, the HWT is not proposed to differentiate anyone's health needs from those of others in the general population. Rather, it is an attempt to highlight particular health concerns that are prone to occur more frequently among persons with ASD than in the population as a whole.

Key websites that the primary health care provider, families and caregivers may find helpful have been included.

About the Developmental Disabilities Primary Care Initiative

The [Developmental Disabilities Primary Care Initiative](#) has brought together clinicians with expertise in the care of adults with developmental disabilities (DD) to improve primary care and quality of life for these persons. An array of tools has been developed to assist primary care providers (general practitioners, family physicians, nurses, nurse practitioners) in caring for adults with developmental disabilities (DD) by helping them to implement various recommendations in the [Primary care of adults with developmental disabilities: Canadian consensus guidelines](#).¹

With leadership and coordination from Surrey Place Centre and funding from the Ontario Ministry of Community and Social Services, the Ontario Ministry of Health and Long-Term Care, and Surrey Place Centre Foundation, Guidelines and Tools have been developed to help primary care providers follow best practices in the care of these patients.

http://ddprimarycare.surreyplace.ca/wp-content/uploads/2018/03/HWT_ASF.pdf

Psychiatric comorbidity



- **More than 50% have more than one mental health comorbidity**

(Abdallah et al., 2011)

- **ADHD, Depression, Anxiety disorders** are some commonly seen comorbid disorders
- **Diagnostic complexity** (e.g., identification of catatonia, suicidality, accurate identification of psychotic symptoms, diagnosing autism in adults with a prior diagnosis of schizophrenia)

Depressive Symptoms in ASD



Major depressive disorder may increase with age

Change in mood or levels of interest/pleasure in activities from baseline

Most often noticed and reported by a third-party
as opposed to affected individual.

Anhedonia may manifest as decrease in repetitive behavior or
usual intensity of circumscribed interests in ASD

Decreased self-care may be observed

New or exacerbated maladaptive behaviors

Suicidality in ASD

- High rates of suicidality in individuals with ASD
- **Needs careful assessment in all cases** – there may be difficulty in assessing suicide risk in people with autism who may find difficult to express and communicate emotions
- 127 (35%) reported that they attempted suicide but only 32% reported experiencing depression
- *Suicidality in ASD is not explained by depression alone*

UK study (Cassidy et al., 2014):- Of 374 adults (256 men and 118 women) with newly diagnosed Asperger's syndrome, 243 (66%) reported suicidal ideation, which is significantly higher than rates in the general population (17%) and psychosis (59%).

Suicidality in ASD



- More recently, 72% adults with ASD were found to have elevated suicide risk, compared to 33% in general population (Cassidy et al., 2018)

- **Risk Factors:**

In general population:

depression, anxiety, substance use, physical/sexual abuse

Risk Factors related to ASD diagnosis:

ASD diagnosis itself, non-suicidal self injury, unmet support needs, camouflaging, unemployment, bullying, changes in routine, deficit in expression of feelings and thoughts, social isolation

Poorly understood – more research is needed to identify interaction between general vs. ASD specific risk and protective factors

Psychosis in Individuals with ASD

Autism and Schizophrenia – there is historical link.

DSM –III (1980) when Autism was demarcated from Schizophrenia

Both conditions can co-exist.

An early report from the UCLA Childhood Onset Schizophrenia (COS) study (Watkins, 1988) found that **39% of a sample of 33 patients had symptoms of autism years before onset of schizophrenia**

UK clinic cohort (Tsakanikos et al (2007) : 16% of individuals with PDD and ID fulfilled criteria for comorbid schizophrenia-spectrum disorder

- **COS is preceded by and comorbid with PDD in 30%-50% of cases** (Rapoport et al. 2009)

Psychosis in Individuals with ASD

Diagnostic Challenges

- Impairment or complete absence of verbal communication
- Unreliable verbal account (people with ID have somewhat increased tendency to answer 'Yes'/'No' inaccurately)
- Validity of 'delusion' if mental age is less than 12 years
- 'Diagnostic overshadowing'
- Co-morbid neurological illness such as epilepsy
- Validity of ICD-10 and DSM diagnoses of Psychosis in severe/profound ID is questionable
- 'Psychosis-like' behaviours



‘Psychosis-like’ behaviours in ASD population

- Self-talk
- Talking to ‘imaginary friends’
- Use of fantasy, imagery
- Regression of functioning
- Posturing or presence of catatonic-like symptoms
- ‘Negative’ symptoms (withdrawal, passivity, lack of initiation, etc)
- Bizarre behaviours, mannerisms, stereotypies



Psychosis in Individuals with ASD

Almost never indications of psychosis

Volitional self talk

Vocal tics

Phenomena modeled from others and/or taught by circumstance or program

Displays of aggression, agitation, shouting or self injury with identifiable triggers

Clinical Approach

- **Consider Autism in the differential diagnosis, especially in ID**
- Gather developmental history, try to obtain collateral information and assessment reports from school and other sources
- AUTISTIC SYMPTOMS EMERGE VERY EARLY AND TEND TO PERSIST vs. ONSET OF POSITIVE SYMPTOMS IN SCIZOPHRENIA IN ADOLESCENCE/ADULTHOOD
- In case of confusion, **presence of clear delusion/hallucination (and NOT negative symptoms, disorganization, poverty of thought, catatonia) for at least a month should be given more importance for making a diagnosis of Psychosis**

Obsessive compulsive disorder vs Repetitive Ritualistic Behaviors in ASD



OCD obsessions

Aggressive, contamination,
sexual, religious, symmetry
and somatic content

OCD compulsions

Cleaning, checking and
counting behaviors

ASD

Repetitive ordering,
hoarding, telling or asking,
touching, tapping,
Rubbing and self-
damaging/self-mutilating
behaviors

Quality/content of repetitive thoughts and behaviors in ASD may differ
Clarify onset, quality and course of repetitive behaviors

Case study

- 23 year old-female with **ASD, Severe ID and no verbal speech** presented with **severe self-injurious behaviour or SIB** (hitting head causing bleeding and bruising), **very loud screaming** (neighbors complained), **intensification of ritualistic behaviours** (insisting on completion of routines in a rigid way) and **increased passivity**.
- Received **behavioural, pharmacological** (risperidone, abilify, mood stabilizers, propranolol, SSRIs) and **occupational therapy** (sensory, environmental modification) intervention with no appreciable clinical improvement .
- SIB and ritualistic behaviours intensified when she was 17-18 years of age.
- Previous diagnoses/formulation include OCD, worsening of difficulties were seen as expected in transitional age youth!

Case example

- Physically healthy
- Psychiatric assessment revealed:
 - Typical pattern of SIB, i.e. occurred before or after completion of task/activity (e.g. before/after climbing stairs, before/after initiating drawing, before/after changing clothes, before/after entering a room, etc)
 - She will typically indulge in intense SIB for few minutes before she was able to proceed with the activity
 - When pushed she went back to the starting point and started to indulge in SIB again

Diagnosis? Any Thoughts?

Case example

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Diagnosis = Catatonia in Autism Spectrum Disorder

Inpatient admission and full remission of SIB within 4 weeks of inpatient admission. Responded to oral lorazepam 3mg TID.

All medications discontinued. Remission is maintained until now.

Catatonia in ASD (Wing and Shah, 2000)

- Increased slowness affecting movements and verbal responses
- Difficulty/increased rituals during initiating and completing actions
- Increased reliance on prompts
- Increased passivity
- Odd stiff posture, gait
- Freezing
- Intensification of ritualistic movements or behavior

Diagnostic overshadowing/misdiagnosis as OCD

Age of onset: 10-17 years of age

Prevalence: ~17% (more common in people with ID who are non-verbal).

Oral lorazepam (First line; often up to 24mg) and **bilateral ECT** treatment of choice.

ASD and behaviours that challenge

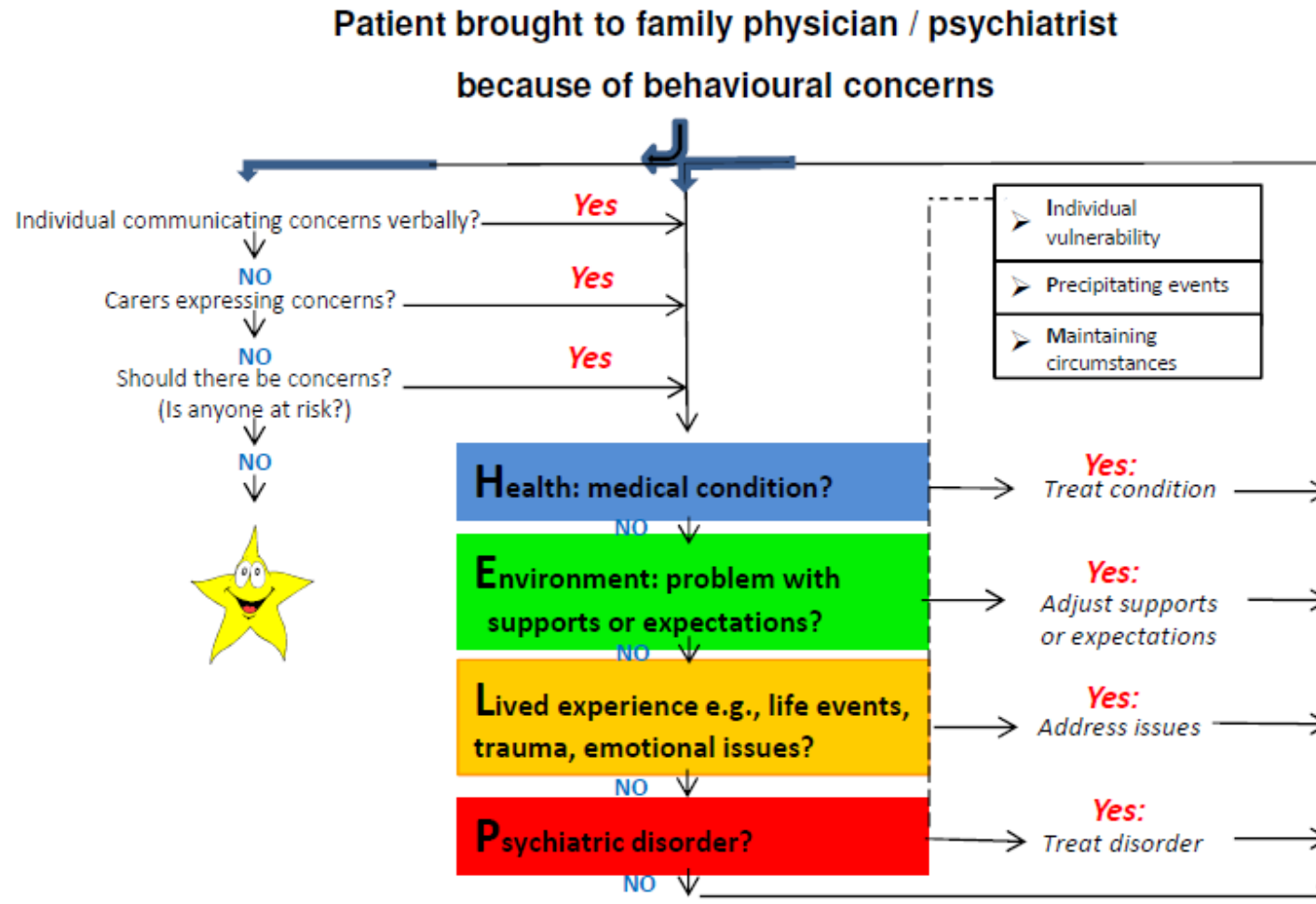
Aggression, Self-injurious behaviors and stereotypic behaviours, others

Frequency ranges from 35.8% to 64.3%

More than one challenging behavior **>50%**



Approach to behavioural concerns



from: Bradley, E. & Korossy, M. Behaviour problems (Chapter 6). In: *Clinical Topics in the Psychiatry of Intellectual Developmental Disorders*, edited by Marc Woodbury-Smith. London, UK: Royal College of Psychiatrists Publications. In press.

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When to consider psychotropic medications in CB

- Psychological or other interventions alone do not produce change within an agreed time
- Treatment for any coexisting mental or physical health problem has not led to a reduction in the behaviour
- Risk to the person or others is very severe

Treatment related challenges

- Mental illness?
- Prescribe?
- Reduction/withdrawal
- Substitution?
- Withdrawal period

Others:

- changes in behaviour
- resistance
- resources to monitor

What helps:

- Clinical discussion – service-user, family, carer, colleagues
- Clear explanation
- Time to consider
- Identify target symptoms; sensitivity/tolerability to medications
- Agree desired outcomes
- Clinical review
- Measurement – clinical effects/side effects

Thank you