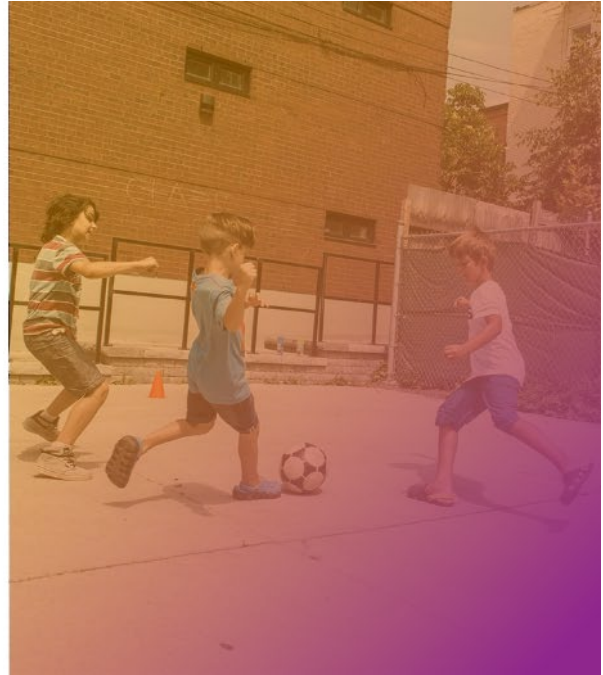




**ADHD and Behavioural Disorders : A
Better Understanding for Improved
Interventions with Children at Risk**

Length of training session: 1½ hours

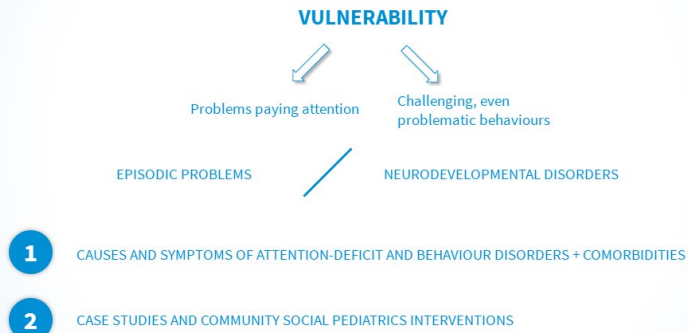


ADHD and Behavioural Disorders

Accompanying and note-taking document

November 2018

Attention-deficit and behaviour disorders



ADHD and behaviour disorders

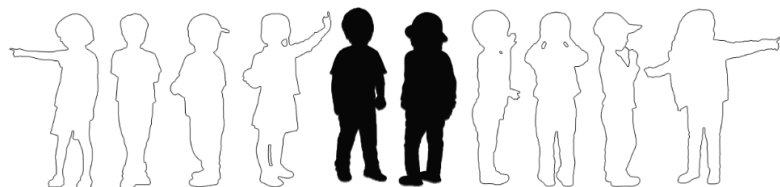
Learning objectives

- Recognize and distinguish symptoms of attention-deficit and behaviour disorders;
- Describe the comorbidities that often go along with these disorders;
- Recognize biological and environmental causes for these disorders in high-risk children;
- And finally, learn how community social pediatrics works to address these issues.



MODULE 01

CLINICAL SYMPTOMS OF BEHAVIOURAL AND ATTENTION-DEFICIT DISORDERS

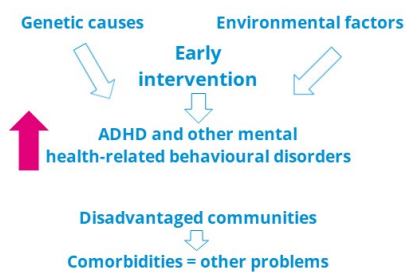


1 in 5 children

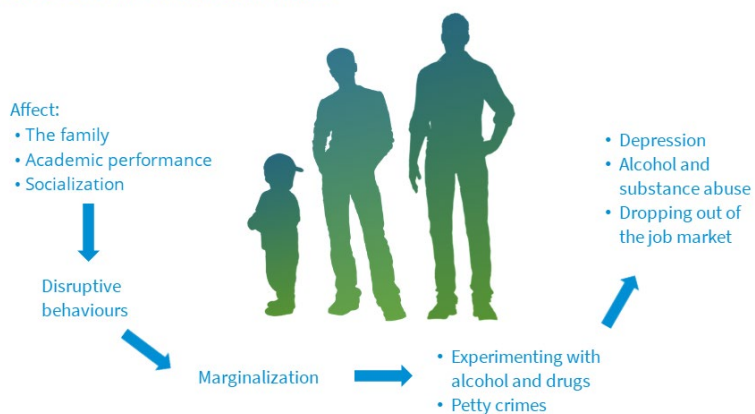
has behaviour problems

- 1 in 5 children has behaviour problems
- 1 in 10 children between the ages of 3 and 4 has behaviour problems
- 98% of five-year-old with behavioural disorders can't access appropriate services
- Impacts on academic achievement
- Affects children's functioning and learning
- Half of children carry the diagnosis with them into adulthood.

1.5 – ADHD and behavioural disorders



1.6 Current and future repercussions



1.7 Clinical symptoms of behavioural and attention-deficit disorders

Course outline

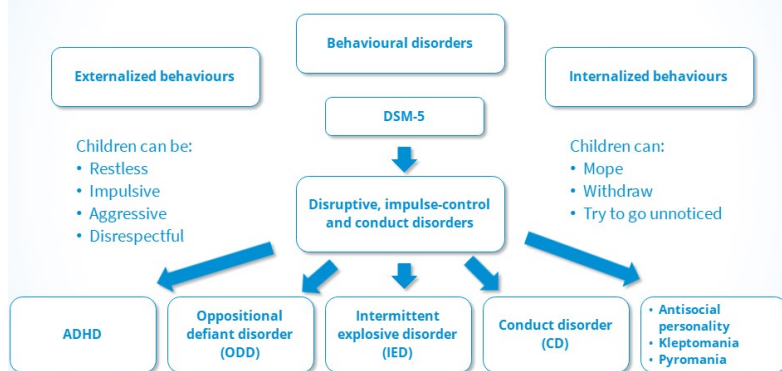
Symptoms of externalized behavioural disorders

Criteria for diagnosing behavioural disorders

Preventing these disorders



1.8 Definition of behavioural disorders



1.9 Externalized behavioural disorders

Click on each child to learn more about their behavioural disorder

Dylan



Oppositional
defiant disorder
(ODD)

Eva



Intermittent
explosive disorder
(IED)

Simon



Conduct disorder
(CD)

1.9.1 Oppositional defiant disorder

Definition

- Displays behaviours that are:
 - Negative
 - Provocative
 - Hostile
- Gets angry easily and often
- Provokes and picks fights with others
- Doesn't give up when he wants something

1.9.1 Oppositional defiant disorder

Symptoms of ODD

DX

- 4 behaviours in the past 6 months
- Inappropriate behaviour compared with children the same age

Click on each symptom to learn about the related behaviours

Anger and irritability

Arguing and provoking

Vindictive behaviour

 <p>1.9.1 Oppositional defiant disorder</p> <p>Treating ODD</p> <p>There is no pharmacological treatment for oppositional disorders.</p> <p>↓</p> <p>Early intervention is critical.</p> <p>↓</p> <p>If ODD is untreated, it can become a conduct disorder during adolescence.</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
 <p>1.9.2 Intermittent explosive disorder (IED)</p> <p>Definition</p> <ul style="list-style-type: none"> • Impulsivity • Trouble controlling: <ul style="list-style-type: none"> • Aggressiveness → Unintentional ↓ Insignificant incidents • Shows remorse after an angry outburst: <ul style="list-style-type: none"> • Is sorry and says so • Recognizes their behaviour is inappropriate 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
 <p>1.9.2 Intermittent explosive disorder (IED)</p> <p>Symptoms of IED</p> <p>DX</p> <ul style="list-style-type: none"> • Repeated aggressive impulses • One of the following two behaviours <p>Click on each symptom to learn about the related behaviour.</p> <p>Verbal or physical violence</p> <p>Major temper tantrums</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>



1.9.3 Conduct disorder (CD)

Definition

- Recurrent and sustained behaviours
- Disregard for:
 - Social norms
 - Other people's rights
- Lack of remorse
- Derives satisfaction from his behaviour
- Spikes in aggressive behaviour:
 - Around 3-4 years of age
 - Around adolescence



1.9.3 Conduct disorder (CD)

Symptoms of CD

DX

- 3 behaviours over 12 months
- 1 behaviour during the past 6 months

Click on each symptom to learn about the related behaviour.

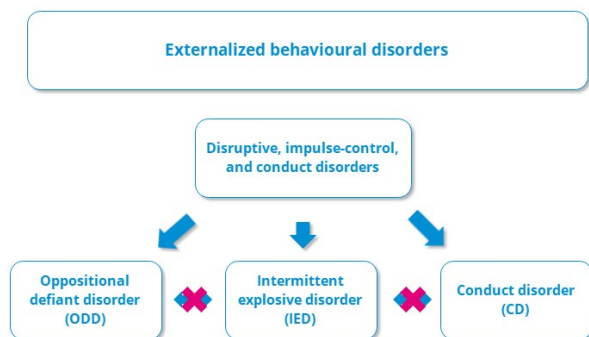
Aggression to people
and animals

Destruction of property

Deceitfulness or theft

Serious violations
of rules

1.10 Externalized behavioural disorders





1.12 Conclusion

Behavioural disorders are among the most common mental health pathologies we see in children.

Behavioural disorders have significant repercussions on:

- The child's family
- The child's academic performance
- The child's social skills

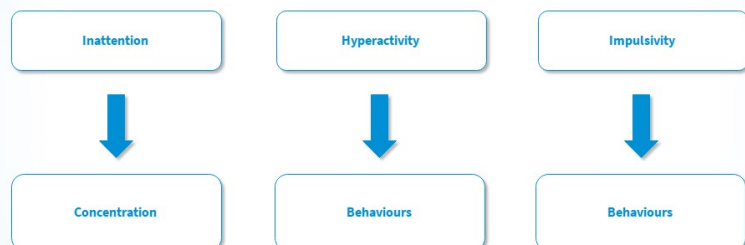
Diagnosis and early intervention can prevent or limit the effects and complications of behavioural disorders.

[Return to the main menu](#)

MODULE 02

ATTENTION-DEFICIT DISORDER WITH OR WITHOUT HYPERACTIVITY

2.1 Definition of ADHD



Inattention

Children:

- Don't pay attention to details or make careless mistakes in homework or other activities;
- Often have trouble staying focused on tasks or when playing games;
- Often don't seem to be listening when someone is speaking to them;
- Don't follow rules and can't finish homework, household chores or other duties;
- Have trouble organizing tasks or activities;
- Avoid, dislike or resist participating in activities requiring sustained concentration;
- Repeatedly lose things needed for school work or activities;
- Are easily distracted by external stimuli;
- Are often forgetful throughout the day.

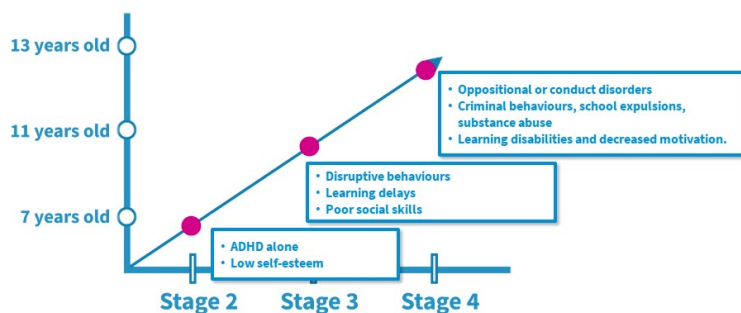
Hyperactivity / impulsivity

Children:

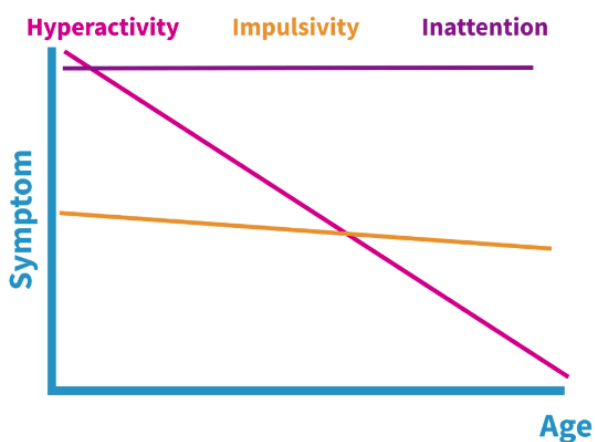
- Fidget with their hands or feet or squirm in their seat;
- Get up often when they are supposed to remain seated;
- Run around or climb everywhere when it is inappropriate to do so;
- Often have trouble staying calm during games or other recreational activities;
- Are often "on edge" and seem to be "bouncing off the walls";
- Often talk too much;
- Often blurt out answers before hearing the complete question;
- Have trouble waiting for their turn;
- Often interrupt or intrude into other people's conversations or games

<p>2.3 Diagnosing ADHD</p> <p>3 conditions :</p> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="background-color: #007bff; color: white; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin-right: 10px;">1</div> <div style="margin-right: 20px;">Symptoms occur</div> <div style="font-size: 24px; margin-right: 10px;">➔</div> <div>For at least 6 months</div> </div> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="background-color: #007bff; color: white; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin-right: 10px;">2</div> <div style="margin-right: 20px;">Behaviours</div> <div style="font-size: 24px; margin-right: 10px;">➔</div> <div>In at least 2 settings (example: at home and at school)</div> </div> <div style="display: flex; align-items: center;"> <div style="background-color: #007bff; color: white; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin-right: 10px;">3</div> <div style="margin-right: 20px;">Behaviours</div> <div style="font-size: 24px; margin-right: 10px;">➔</div> <div>Interfere with a child's functioning and development</div> </div>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>2.4 – Impacts of ADHD</p> <p>Before school:</p> <ul style="list-style-type: none"> - Trouble: <ul style="list-style-type: none"> ○ Waking up ○ Getting Ready - Very volatile relationship with parents <p>At school:</p> <ul style="list-style-type: none"> - Lower marks - Lack of concentration - Disruptive behaviours - Problems making and keeping friends <p>After school:</p> <ul style="list-style-type: none"> - Trouble doing homework and participating in after-school activities - Unsafe behaviours and injuries - Problems making and keeping friends <p>At bedtime:</p> <ul style="list-style-type: none"> - Trouble <ul style="list-style-type: none"> ○ Getting ready for bed ○ Relaxing / falling asleep 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

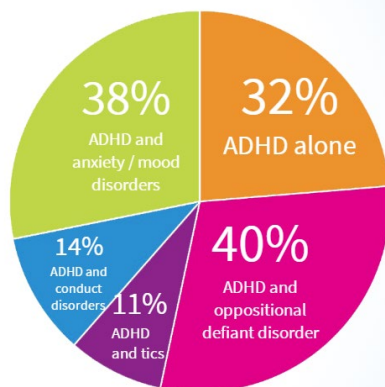
2.6 Developmental stages of ADHD



2.6 Developmental stages of ADHD



2.8 Comorbidities of ADHD



2.9 Risks associated with untreated ADHD

Untreated ADHD increases the risk for:

- Learning delays
- Teen pregnancy (7-8 times higher)
- Sexually transmitted diseases
- Substance abuse
- Accidental injuries (9 times more visits to hospital emergency departments)
- Incarceration
- Job dismissals
- Suicide attempts





2.10 Conclusion

ADHD is one of the most prevalent behavioural disorders.



Untreated ADHD has many repercussions:

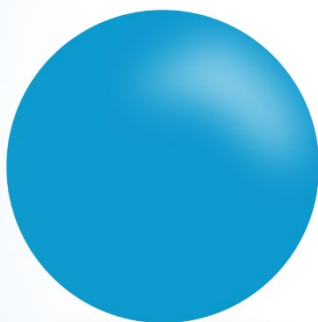
- Comorbidities
- Increased associated risks (criminal behaviours, school expulsions, substance abuse)

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MODULE 03

CAUSES AND RISK FACTORS

3.1 Causes and risk factors: Introduction



- Genetic factors
- Changes in the brain
 - Intellectual disabilities
 - Traumatic brain injury
 - Neuroanatomical or neurochemical factors
- Environmental factors

<p>3.2 Risk factors</p> <p>Click on each factor to learn more.</p> <div> <div>Genetic factors</div> <div>Biopsychosocial factors</div> <div>Social factors</div> <div>Family factors</div> </div>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>3.3.1 Genetic factors</p> <p>No study has been able to clearly identify the genes linked to ADHD</p> <p>Hypothesis 1 → Neurotransmitters are not working properly.</p> <p>Hypothesis 2 → ADHD children's brains are significantly different from other children's brains.</p> <p>These factors alone cannot explain the occurrence of ADHD, which confirms that its causes are multifactorial.</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>3.3.2 Biopsychosocial factors</p>  <p>Pre-, peri- and post-natal complications</p> <ul style="list-style-type: none"> • Smoking and alcohol/drug use • Caesarean (C-section) birth • Anesthesia during delivery • Length of labour • Perinatal asphyxia • Low birth weight • Premature birth • Low Apgar score 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

3.3.3 Social factors

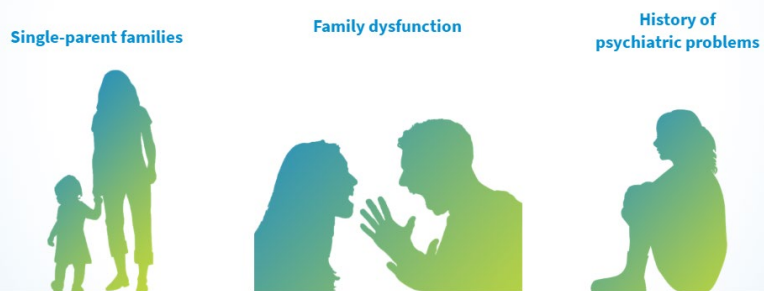


For example:

Low socio-economic status = ↑ Risk of smoking and using drugs

3.3.4 Family factors

Major role in the development of behavioural disorders and ADHD



3.4 Parents and ADHD

Dx of ADHD in parents
of a child with ADHD

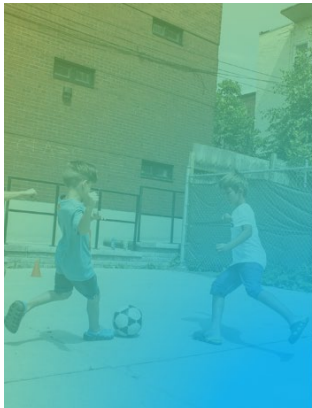




3 times more than in the general population

Children are more likely to have
persistent and long-lasting ADHD.



 <h3>3.6 Conclusion</h3> <div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; padding: 5px; margin: 0 10px;">Cause</div> <div style="font-size: 2em; margin: 0 10px;">✕</div> <div style="border: 1px solid black; padding: 5px; margin: 0 10px;">Effect</div> </div> <p>Behavioural disorders and ADHD are the result of a combination of factors:</p> <ul style="list-style-type: none"> Genetic Biological Social Family <p>It is possible to work on these behaviours through early intervention.</p> <p>Early intervention may eliminate or reduce the impacts of behavioural disorders on a child's development.</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<h2>MODULE 04</h2> <h3>ADDRESSING ATTENTION-DEFICIT AND BEHAVIOURAL DISORDERS</h3>	
<h4>4.1 How community social pediatrics works</h4> <h3>Case studies</h3> <p>Behavioural and attention-deficit disorders result from a combination of genetic, social and family factors.</p> <p>The community social pediatrics approach is to work proactively so we can address symptoms of these disorders effectively.</p> <p style="color: red; font-size: small;">Click on Joachim's case to begin.</p> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px; background-color: #f0f0f0;">Joachim's case</div> <div style="border: 1px solid black; padding: 5px; background-color: #f0f0f0;">William's case</div> </div> 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
 <h4>4.2 How community social pediatrics works</h4> <h3>Introduction</h3> <p>Joaquim, 3½ years old, comes to the community social pediatrics centre for the first time with his mother and a community worker. The family has been referred to the centre because of the boy's behaviour problems.</p> <p>The family goes to a community centre. Joaquim attends group activities 4 times per week.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px; text-align: center; color: red; font-size: small;">Read the details of the case study</div>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

 <h3>4.8 Action plan</h3> <p>The community social pediatrics approach</p> <ol style="list-style-type: none"> 1 Eliminate other explanations for Joaquim's restless behaviour. <ul style="list-style-type: none"> • Request a hearing test 2 Set up interventions to help Joaquim develop his language and organizational skills. 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<h3>4.9 Structure and routine for Joaquim</h3> <p>Joaquim may be developing ADHD</p> <p>Set up appropriate interventions →</p> <ul style="list-style-type: none"> • Increased stimulation • Suitable structure and regular routines <p>At home and at daycare</p> <ol style="list-style-type: none"> 1 Introduce stimulation activities 2 Set up the same routines <p>↑ Language ↑ Organization</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
 <h3>4.10 Conclusion</h3> <p>Joaquim's case:</p> <p>The community social pediatrics team decides not to prescribe medication to Joaquim. He is young, and his mother and the daycare worker are able to handle his behaviour.</p> <p>Joaquim sleeps and eats well and is sociable. So, we can verify the language hypothesis and test other possibilities without compromising his health.</p> <p>The community social pediatrics team will meet with Joaquim and his family in four months to follow up.</p> <p>Joaquim</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>



William

4.12 William's case

Introduction

William, 7 years old, has come to the clinic to be assessed for ADHD. Medication is being considered.

Attending the meeting:

- William and his parents
- The school's psychoeducator
- Social worker
- Nurse
- Doctor

Read the details of the case study

Case study

William's situation and family environment

William is a generally healthy seven-year-old boy. He was a full-term baby and there was nothing unusual about the pregnancy. He doesn't take any medication. The parents don't know if his vaccinations are up-to-date. Ever since starting daycare, he has been prone to constipation.

William has always lived with both his parents and his four brothers and sisters. The family is healthy. Both his parents began working evening shifts six months ago. The family lives in a three-bedroom apartment. William shares a bedroom with his two older brothers. They don't get any services from the local community health clinic.

William's development has been normal. He had no behaviour problems at daycare. His parents say that he has been having temper tantrums often at home for a few months now. They find that the best way to control these episodes and to reduce the length of the tantrums is to avoid upsetting him. He often fights with his siblings in the evenings and is frequently physically violent. His father has had to hold him down several times over the past few weeks for everyone else's protection. Sometimes he says he is sorry for what he said or did during these tantrums.

The psychoeducator tells you that William is having a lot of trouble focusing in class. He often gets up from his seat and sometimes refuses to do what he is asked. On the other hand, when he embarks on a task that he likes, he can finish it in just a few minutes without making many mistakes. He is becoming more and more isolated in the schoolyard because of his frequent conflicts with other kids. He has trouble following rules when he plays games with others. When someone at school says no to him, this can trigger an enormous tantrum. The psychoeducator often has to intervene but other than that, William doesn't see her regularly.

Since school started this year, William has been failing most of his subjects. He hardly ever does his homework.

He often complains of stomach aches at school, which worries his teacher. Every day, he says his tummy hurts. He never has stomach aches at home. He has a bowel movement every other day or every three days. His stool is hard and having a bowel movement is painful for William. He has blocked the toilet a couple of

times, which is why he holds it in and never has a bowel movement at school. There is no blood in his stool. There has been no recent change in his weight or his appetite, nor any vomiting.

His sleep is normal. His diet is low in fruit and vegetables and he doesn't drink much water.

The rest of the questionnaire doesn't reveal anything unusual

Case study

Physical examination

William's growth curve is normal, as is his blood pressure. His clothes are full of stains and he exudes a strong, unpleasant smell. His nails are long and dirty. He has long, tangled hair.

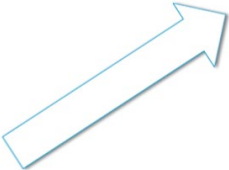
When you examine his mouth, you notice several cavities.




When he strips down to his underwear so you can examine his lower limbs, you notice some stool soiling in his underpants. His abdomen is normal, as are the neurological examinations of his lower limbs and spine. The examination shows nothing else out of the ordinary.

You check William's vaccination record. He hasn't been vaccinated since he was one.

While you are doing the physical examination, the parents talk with the social worker. They admit that the last few months have been very difficult for the family. William's godfather died by suicide a few weeks ago. He and William were very close, but William won't talk about it with his family. They are saddened to discover at this meeting that William is having so much trouble at school. According to them, he has never had problems and they had hoped he would do well in school. They admit that they have sort of lost track of what is happening because they aren't home on weeknights. The parents also mention that they are currently having relationship problems and that they almost separated this year. They decided to stay together but they still argue frequently and they sometimes "yell at each other".

When you return to the table with William, the social worker tries to bring up the topic of William's godfather with him, but he says he doesn't want to talk about it.

<p>4.22 Action plan</p> <p>Several difficulties:</p> <ul style="list-style-type: none"> • Limited parental presence • Loss of his godfather • Problems in school <p>Community social pediatrics approach</p> <p>Lifecourse trajectory</p>  <p>Successes</p> <p>Long-term consequences in adulthood:</p> <ul style="list-style-type: none"> • Employability • Interpersonal relationships • Mental and physical health • Etc. 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>4.23 Assessment/course of action meeting</p> <p>Assessment/course of action meeting</p> <ul style="list-style-type: none"> • Build a trusting relationship • Share all information needed to understand a child's situation. <p>Work together to formulate:</p> <ul style="list-style-type: none"> • Working hypotheses • An action plan <p>E E D A</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>4.24 William's assessment/course of action meeting</p> <p>The meeting about William</p> <p>School professionals</p>  <ul style="list-style-type: none"> • Possible ADHD • Need for medication <p>Parents</p>  <ul style="list-style-type: none"> • Unaware of his problems at school • Seem baffled by his behaviour 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

 <p>4.25 Outcomes of the assessment/course of action meeting</p> <p>Discuss behaviour problems Recognize the stressors linked to these behaviours</p> <p style="text-align: center;">  ADHD William doesn't meet the criteria He is nonetheless in great emotional distress </p> <p>The community social pediatrics team suggests:</p> <ul style="list-style-type: none"> • William's behaviour is a symptom of this distress • We find ways to ease his suffering 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>4.26 Coming up with solutions so William can meet with success and have positive experiences</p> <p style="text-align: center;">Interests / dreams / abilities</p> <p>1 Suggest an activity that William will like</p> <ul style="list-style-type: none"> • Register him in a sports or recreational activity • Get to know William • Invite him to the community social pediatrics centre • Build a trusting relationship with him <hr/> <p>2 Meet with parents</p> <ul style="list-style-type: none"> • Understand the parents' reality • Build a trusting relationship with the family • Get a sense of what the parents would like to do to help William • Allow everyone to better understand the situation 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
 <p>4.27 Conclusion</p> <p>Some children seem to have behavioural disorders or ADHD, but don't meet the diagnostic criteria for these conditions.</p> <p>Disruptive behaviours often stem from difficult living situations.</p> <p>We need to:</p> <ul style="list-style-type: none"> • Recognize stressors in a child's life • Do an overall assessment of the child <p>William's case:</p> <p>The school psychotherapist can set up services to meet William's needs.</p> <p>The community social pediatrics team will meet with William and his family in a few months to follow up and modify the action plan accordingly.</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>