

COMMUNITY NETWORKS  
OF SPECIALIZED CARE  
RÉSEAUX COMMUNAUTAIRES  
DE SOINS SPÉCIALISÉS  
EASTERN ONTARIO - EST DE L'ONTARIO

# DUAL DIAGNOSIS

**Terry Broda**  
RN[EC], BScN, NP-PHC, CDDN  
Solution-s  
(w/ some slides from Dr. Bob King, with permission)

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## Consensus Guideline #25

**Input and assistance from adults with DD and their caregivers** are vital for a shared understanding of the basis of problem behaviours, emotional disturbances, and psychiatric disorders, and for effectively developing and implementing treatment and interventions.

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## People with Intellectual & Developmental Disabilities (PWIDD)

- 1-3% of population
  - 275,000 in Ontario
- 90% in mild range
- < 50% have known etiology (DS, FXS)
  - Advances in genetics
- 38% also have a mental health disorder
- Increasingly aging

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## Case presentation

Ideas?

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## Case study...

O/E:

- Febrile
- With pharyngeal congestion
- Mild bilateral tonsillar enlargement
- A provisional diagnosis of retropharyngeal abscess was made
- & X-rays RX'ed

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## Case presentation

Ideas?

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## GERD & Constipation

- Heartburn during or after meals, or when bending over or laying down
- Hiatal hernia
- Regurgitation, cough, hoarse voice also S/S
- Ulcers cause pain in between meals or can wake you from sleep
- N BM pattern: 3-20X/week!
- Check type (Bristol) & look for distension (abd circ), loss of appetite or refusal to eat

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## RCN Document

“Health problems might be accompanied by unusual signs and symptoms, for example someone with severe learning disabilities might demonstrate discomfort by self-injuring.”

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## Challenging Behaviors

- SIB
- Aggression
- Refusals
- Withdrawal or irritability
- Yelling
- “Non-compliance”: changes in sleep pattern, appetite, or activity level

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## Pain Assessment \*

### Indicators of pain:

- SIB or aggression
- Refusals
- Withdrawal or irritability
- Yelling
- "Non-compliance": changes in sleep pattern, appetite, or activity level
- Denial, inability to communicate or high pain tolerance?

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## Things that make you say Hmmm...

- Prevalence of mental illness in individuals with developmental disabilities is high.
- Use of psychiatric medication has been reported as approaching 26-40% in community residential placements and 35-50% in institutions in North America.
- Aggression, self-injurious behaviour, over activity, and sleep disturbances are all common.

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## Mental health concerns in persons with MR/DD...

- Difficult to diagnose with accuracy
- Prevalence higher than in the general population
- 2-3 X higher (Dosen et Day, 2001)

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## Things that make you say Hmmm...

### Prevalence

- Approximately 1% of general population is developmentally disabled (Ontario - 100,000; Kentucky-??)
- At least 30% of the developmentally disabled population is dually diagnosed (Ontario - 30,000, Kentucky-??)

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## Things that make you say Hmmm...

- Behavioural changes are often linked to underlying cognitive (thinking) changes, and mood changes occurring in the context of:
  - adverse reactions to prescribed medications
  - distress arising from a physical illness
  - distress arising from mental illness

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## Case presentation

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## Medications: Polypharmacy

1. Medication reconciliation:
2. Interview with patient or a caregiver
3. Medication vials or blister packs
4. Current medication list (i.e., from the pharmacy or provincial records)
5. Warfarin/coumadin, insulin, digoxin!
6. Anticholinergics!
7. Tranquilizers and other sedating Rx: risk of FALLS
8. Bisoprolol & Bisacodyl!
9. Pharmacokinetics in the elderly...

[www.ismp-canada.org/beers\\_list/#l=tab1](http://www.ismp-canada.org/beers_list/#l=tab1)

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## Anticholinergic Side Effects

- Confusion
- Blurry vision
- Nasal congestion
- Dry mouth
- Urinary retention
- Constipation



**Caution:** antipsychotics, older antidepressants

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## Pharmacology in the Elderly

Determinant	Effect of Aging	Clinical Implications
Absorption	Increased gastric emptying time	Little
Distribution	Increased body fat Decreased body water	Decreased elimination of fat-soluble drugs Increased effect of water-soluble drugs
Protein Binding	Decreased serum albumin	Increased free fractions of some drugs leading to toxicity

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Determinant	Effect of Aging	Clinical Implications
Hepatic Metabolism and Clearance	Decreased oxidative metabolism	Decreased clearance of most drugs
Renal Metabolism and Clearance	Decreased renal blood flow	Decreased clearance of water-soluble drugs
End-organ sensitivity	Increased	Increased effects at lower doses

**Reduce daily dosage for elderly!**

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## Medications

- Safe storage
- Safe administration, limit errors
- Name & photos well-indicated
- Clear & precise documentation :
  - Regular Rx
  - PRNs
- Effects of the PRNs well-documented
- Observational Pain checklist
- Medication history & regular Rx review

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## Metabolism

- Hepatic enzymes = Cytochrome P450 system (CYP-450) (about 30 different enzymes).
- Drugs metabolized by an enzyme are *substrates* of that enzyme
- **Possible drug/metabolite interactions:**
  - **Competition:** substrates compete for same enzyme (2<sup>nd</sup> substrate can be less 'effective')
  - **Inhibition:** blocking enzyme activity (may cause toxicity)
  - **Induction:** accelerated metabolism of drugs or their substrates (decreases drug effect as it is metabolized quicker & then eliminated, ex. smoking & clozaril)

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## Case presentation

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## Dental problems

- Most common medical concern in persons with I/DD!
- Australian study: 86 % frequency!
- Why is risk of dental caries so high?
  - Inadequate oral hygiene!
  - Snacks rich in sugar & carbohydrates lower pH
  - Lack of saliva, or thick saliva that is unable to neutralize the acidity
  - Less fluoride available for remineralisation

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## The Usual Suspects

- Dental issues (up to 86%!)
  - ( 7 X more in DD!)
- Vision problems (40%-59%)
- Hearing problems (33-40%)
- Constipation (up to 70%!)
  - Reflux (up to 50%!)
    - H. Pylori infection (60-90%!)
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# Case presentation

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# Changes in appetite & weight

- Diabetes
- Hyperthyroidism
- Hypothyroidism
- Hypoparathyroidism
- Malignancies/tumors/cancer
- Problems related to intake, retention, absorption, or metabolism

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# Case presentation

Ideas?

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## PWS

- T°- regulation impaired
- Gag reflex impaired
- Decreased pain sensitivity

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## Prader-Willi

- Obesity-related illness:
  - Diabetes                      - Sleep apnea
  - Pica                              - Hyperlipidemia
  - HTN                              - Cellulitis (skin-picking)
- Osteoporosis, scoliosis, kyphosis
- Decreased vomiting
- Thick viscous saliva: increased caries

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## PWS: monitoring

- Developmental & educational assessment with speech therapy assessment
- Assess males for cryptorchidism
- Strabismus in infants & children
- X-rays to r/o scoliosis
- Bone density to r/o osteoporosis
  - (may need Ca+ supplementation)
- Annual BMI
- HgbA1C for those with significant obesity
- Sleep study to r/o sleep apnea
- **Psych assessment to r/o OCD & psychosis: hoarding, skin-picking & other symptoms**

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## Behavioral phenotype

- Prader-Willi Syndrome
- “Temper tantrums”
- Impulsivity
- «Stubbornness» (rigidity?)
- «Skin-picking»
- Mood disorders & psychosis
- OCD, behavioral rituals : 24-49 %

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## Consensus Guideline #22

- Despite the absence of an evidence base, psychotropic medications are regularly used to manage problem behaviours among adults with DD.
- **Antipsychotic drugs should no longer be regarded as an acceptable routine treatment of problem behaviours in adults with DD.**

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## Consensus Guideline #27

- Having excluded physical, emotional, and environmental contributors to the behaviours of concern, a **trial** of medication **appropriate** to the patient’s symptoms **might** be considered.

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## Psychotropic Medication Classes

### Antipsychotics

Target psychomotor agitation & aggressive behaviour, particularly in the presence of psychotic symptoms (hallucinations, delusions, and disorganized behaviour)

- **Traditional**

Haloperidol (Haldol), Chlorpromazine (Thorazine/Largactil), Methotrimeprazine (Nozinan), Trifluoperazine (Stelazine), Loxapine (Loxapac)

- **Atypical**

Clozapine (Clozaril), Risperidone (Risperdal), Paliperidone (Invega), Olanzapine (Zyprexa), Quetiapine (Seroquel), Ziprasidone (Zeldox/Geodon), Aripiprazole (Abilify)

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## Atypical Antipsychotic Medication

Risperidone (Risperdal)

Paliperidone (Invega)

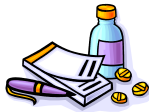
Clozapine (Clozaril)

Olanzapine (Zyprexa)

Quetiapine (Seroquel)

Ziprasidone (Geodon)

Aripiprazole (Abilify)



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## Acute Dystonia

Clinical Signs/Symptoms			
Motor Symptoms	Psychological Symptoms	Differential Diagnosis	Risk
Briefly sustained or fixed abnormal movement e.g., torticollis (30%) tongue (25%) trismus/jaw (14.6%) oculogyric crisis (6%)	<ul style="list-style-type: none"> <li>• fear</li> <li>• anxiety</li> </ul>	<ul style="list-style-type: none"> <li>• malingering</li> <li>• seizure</li> <li>• catatonia</li> </ul>	<ul style="list-style-type: none"> <li>• high potency first-generation antipsychotics (FGAP)</li> <li>• young males</li> <li>• first exposure to FGAP</li> </ul>

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## Case presentation

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## Akathisia

Clinical Signs/Symptoms			
Motor Symptoms	Psychological Symptoms	Differential Diagnosis	Risk
<ul style="list-style-type: none"> <li>• Foot shifting</li> <li>• Pacing</li> <li>• Rocking</li> </ul>	<ul style="list-style-type: none"> <li>• Agitation</li> <li>• Restlessness</li> <li>• Decreased concentration</li> </ul>	<ul style="list-style-type: none"> <li>• Psychotic exacerbation</li> </ul>	<ul style="list-style-type: none"> <li>• High potency first-generation antipsychotics (FGAP)</li> <li>• Elderly</li> <li>• Female</li> </ul>

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## Parkinsonism

Clinical Signs/Symptoms			
Motor Symptoms	Psychological Symptoms	Differential Diagnosis	Risk
<ul style="list-style-type: none"> <li>• Tremor</li> <li>• Bradykinesia</li> <li>• Rigidity</li> <li>• Akinesia (masked facies, decreased arm swing)</li> </ul>	<ul style="list-style-type: none"> <li>• Poor concentration attention</li> <li>• Bradyphrenia</li> </ul>	<ul style="list-style-type: none"> <li>• Depression</li> <li>• Negative symptoms of psychosis</li> </ul>	<ul style="list-style-type: none"> <li>• High potency first-generation antipsychotics (FGAP)</li> <li>• Elderly</li> <li>• Female</li> <li>• Neurological disorders</li> </ul>

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## Tardive Dyskinesia (TD)

### Diagnostic Criteria:

- History of three (3) months total cumulative neuroleptic use
- Dyskinesia of lingual-facial-buccal muscle (most common), upper face, limb, trunk
- Movements which are repetitive, stereotyped in appearance and distribution
- Most common is choreoathetoid movements (classical TD)
- Gait is usually not affected

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## TD Risk Factors

Variable	Factor	Determinant of Increased Risk
Patient Characteristics	<ul style="list-style-type: none"> <li>• Age</li> <li>• Gender</li> <li>• Diagnosis</li> <li>• Previous EPS</li> <li>• Diabetes</li> </ul>	<ul style="list-style-type: none"> <li>• Increased risk w/ age (&gt;55)</li> <li>• Female (slightly higher)</li> <li>• Affective disorder</li> <li>• Risk 2 to 3 times higher</li> <li>• Risk 50-100% higher</li> </ul>
Drug Characteristics	<ul style="list-style-type: none"> <li>• Type of neuroleptic</li> <li>• Dose/Duration</li> <li>• Continuous vs. intermittent</li> </ul>	<ul style="list-style-type: none"> <li>• Typical neuroleptics have similar liability</li> <li>• Positive correlation with total drug exposure</li> <li>• Higher with intermittent treatment</li> </ul>

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## Extra Pyramidal Symptom Assessment

Tremors ✓ ✓ mild ✓ moderate ✓ severe	Alcoholism > > mild > moderate > severe	Dyskinesias ✗ ✗ mild ✗ moderate ✗ severe	Dystonia ▲ ▲ mild ▲ moderate ▲ severe	Rigidity + + mild ++ moderate +++ severe

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**Tardive Dystonia**

Clinical Signs/Symptoms		Risks
<b>Motor</b> <ul style="list-style-type: none"> <li>Sustained muscle contractions</li> <li>Blepharospasm</li> <li>Sustained jaw opening (83%)</li> <li>Torticollis (50-65%)</li> <li>Arm hyperextension (42%)</li> <li>Back arching/flexion/leaning (35%)</li> <li>Hand flexion/grasp-like</li> </ul>	<b>Psychological</b> <ul style="list-style-type: none"> <li>Distress</li> <li>Mobility dysfunction</li> <li>Embarrassment</li> </ul>	<ul style="list-style-type: none"> <li>Abnormal birth</li> <li>Abnormal development</li> <li>Neurological disorders</li> <li>Diagnosis of a developmental disability</li> <li>Male, younger age</li> <li>Earlier onset</li> </ul>

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**Other side effects**

- Sedation, gait disturbance, orthostatic hypotension => increased risk of falls
- Metabolic issues: diabetes, hyperlipidemia, abdominal girth
- Anticholinergic side effects

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**Anticholinergic Side Effects**

- Blurry vision
- Nasal congestion
- Dry mouth
- Urinary retention
- Constipation\*



(\*deaths with Clozapine)

Rx : tricyclic antidepressants, antipsychotics

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## NMS recall: F-E-V-E-R

**Cause:** d/t blockage of dopamine receptor

**S/S:**

- Fever: hyperthermia & diaphoresis
- Encephalopathy: abrupt onset confusion, stupor
- Vital sign instability: BP unstable, tachycardia
- Enzyme elevation: CPK (creatinine phosphokinase)
- Rigidity: "lead pipe" rigidity (generalized)

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## Case presentation

Ideas?

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## VCFS/22q-

- ENT: Cleft palate, otitis, deafness
- Visual problems: cataracts, tortuosity of retinal vessels (30%)
- Cardiovascular abnormalities (85%): R aortic arch (52%), Tetralogy of Fallot (21%), ASD, VSD (62%)
- Immune system problems (\*vaccines not effective) (r/t thymus)
- Hyper/hypothyroidism
- Scoliosis, arthritis
- Renal abnormalities: absent/dysplastic/multicystic kidneys, hypospadias, reflux, obstructive uropathy
- Mental health: Bipolar disorder, schizophrenia, anxiety

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## Behavioral phenotype

- 22q- Syndrome
- 25 X mental health issues:  
ADHD, anxiety, mood dx (depression & bipolar disorder), psychosis (schizophrenia)

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## DSM-IV

- Bipolar disorder
  - Manic episodes or mixed + major depressive episodes
  - Cyclothymia:
    - Chronic mood disturbance > 2 yrs
    - Hypomania alternating w/ dysthymic depression
    - NO severe impairment in social or occupational function, NO  $\psi$  S/S (delusions)

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## Diagnostic criteria DM-ID for manic episode

- Criteria A: a distinct period of abnormally persistently elevated, expansive or irritable mood lasting at least a week
- Observed behaviors: inappropriate laughing or singing, excessively giddy or silly, intrusive, excessive smiling in ways that are not appropriate to the social context. (Elated mood may be alternating with irritable mood.)

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### Hypomania/Mania DSM-IV Diagnostic Criteria Behavioral Equivalents

At least 3 symptoms must be present if patient has euphoric mood. Four symptoms must be present if patient only has irritable mood.

<p><b>DSM - IV Criteria</b></p> <p><b>Mood State</b></p> <ul style="list-style-type: none"> <li>Euphoric/elevated/irritable mood (no minimum duration necessary)</li> </ul> <p><b>Symptom Criteria</b></p> <ul style="list-style-type: none"> <li>Inflated self esteem/grandiosity</li> <li><b>Decreased need for sleep (3 hrs)</b></li> <li>More talkative/pressured speech</li> <li>Flight of ideas/racing thoughts</li> <li>Distractibility</li> <li><b>Increased goal directed activity/psychomotor agitation</b></li> <li>Excessive involvement in pleasurable activities</li> </ul>	<p><b>Observed Equivalents in persons with BD</b></p> <ul style="list-style-type: none"> <li><b>Boisterousness or excitement</b> may be the predominant mood state. Self-injury may be associated with irritability</li> <li>Altered estimation of adaptive skills</li> <li><b>Shortened sleep duration</b></li> <li>Increased frequency of vocalization irrespective of patients usable speech</li> <li>Disorganized speech</li> <li><b>Decrease in workshop performance</b></li> <li><b>Increase in aggression, self-injurious behaviour</b></li> <li>Teasing behaviour, fondling others, publicly masturbating</li> </ul>
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### Antidepressants in Bipolar Depression: Hazardous Situations

- Prior antidepressant-induced mania
- Rapid cycling
- Mixed depression
- Post-manic depression
- Low illness-awareness
- Substance abuse
- Anxious depression

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### Definitions of Mood-Stabilizer:

- Substance which is effective for one pole without inducing the other
- Substance which is effective for both poles of the illness
- Substance which is effective for both poles of the illness and for prophylaxis of recurrences

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## Psychotropic Medication Classes

### Mood Stabilizers

- Lithium Carbonate
- Carbamazepine (Tegretol)
- Valproic Acid (Epival, Depakene)
- Lamotrigine (Lamictal)
- Topiramate (Topamax)

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## Problems of Current Mood Stabilizers

- Limited efficacy
- Toxicity
- Side effects: renal, thyroid, hematological, hepatic
- Monitoring
- Interactions
- Teratogeny
- Weight gain
- Poor compliance
- Refractoriness



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## Lithium

- Therapeutic Range
  - 0.7 – 1.2 mEq/L
- Clearance predominantly through kidneys (95%)
- Dosing adjusted based on renal function
  - Individuals with chronic renal insufficiency must be closely monitored
  - Reabsorption of lithium is increased and toxicity is more likely in patients who are hyponatremic or volume depleted (ex. vomiting, diarrhea, diuretics)
- Half life
  - 12 – 27 hours
  - Increases to 36 hours in elderly persons (\*\*renal function)
  - May be considered longer with long-term lithium use (up to 58 hours after one year of therapy)

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## Lithium Toxicity

- Closely related to concentration of lithium in the blood
  - \* Serum concentrations in excess of 2mmol/L
- Preceded by appearance/aggravation of:
  - Sluggishness, drowsiness, lethargy, coarse hand tremor or muscle twitching, loss of appetite, vomiting and diarrhea
  - \*\*repeated episodes of lithium toxicity can cause kidney damage

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## Lithium Toxicity

- **Treatment:**
  - D/C lithium therapy
  - Support resp & cardiac functions
  - Depending on mental status, use ipecac syrup or gastric lavage
  - Follow with charcoal and saline cathartic if multiple ingestion
  - Restore fluid and electrolyte balance
- \* **Hemodialysis is treatment of choice when above measures fail**

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## Important considerations:

- 30-50% of persons with DD have epilepsy, so they may be receiving AEDs (Devinsky, 2002)
- Persons with DD may be 3-4 X more likely to have a psychiatric illness (Hellings, 1999)
- Persons with DD are more prone to drug side effects & are also often unable to articulate the effects of the drugs
- 40-60% of persons in general population show inadequate response to mood stabilizer Tx alone & require additional Rx (antipsychotics) (Hellings, 1999)

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## Classic & Newer AEDs

**Classic AEDs**

- Phenobarbital (PB)
- Ethosuximide (Zarontin®)
- Clonazepam (Rivotril®) -> benzo
- Phenytoin (Dilantin®)

**N/A in Canada yet:**

- Tiagabine (Gabitril®)
- Zonisamide (Zonegran®)
- Rufinamide (Banzel®) (used for LGS)
- Lacosamide (Vimpat®)

**Newer AEDs**

- Primidone (Mysoline®) -> PB
- Clobazam (Frisium®) -> benzo
- Nitrazepam (Mogodon®) -> benzo
- Carbamazepine (Tegretol®) (CBZ)
- Divalproex (DVA)/Valproate/Valproic Acid (Epival®/Depakene®) VPA >GI SE
- Levetiracetam (Keppra®)
- Felbamate (Felbatol®) D/C d/t liver probs
- Vigabatrin (Sabril®) Restricted d/t vision probs
- Oxcarbazepine (Trileptal®) ->CBZ
- Gabapentin (Neurontin) -> gaba
- Lamotrigine (Lamictal®) ->no P450!
- Topiramate (Topamax®)
- Pregabalin (Lyrica®) ->gaba

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## Drug Levels

• Carbamazepine (CBZ) 17-54 µmol/L 4-12 mcg/ml	• Phenytoin (PHT) 40-80 µmol/L 10-20 mcg/ml
• Phenobarbital (PB) 65-150 µmol/L 20-40 mcg/ml	• Valproic acid (VPA) 350-800 µmol/L 50-115 mcg/ml

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## Case presentation

Ideas?

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## Down Syndrome

- Hypothyroidism
- Sleep apnea
- Depression
- Alzheimer's (>40)
- Epilepsy
- Atlanto-axial instability
- Degenerative disc disease of C-spine
- Dental concerns: (gingivitis, bruxism, malocclusion)
- Lymphoblastic leukemia
- Celiac disease
- Obesity
- Congenital heart defects
- Mitral valve prolapse
- Hearing deficits
- Higher risk AOM/OE
- Higher risk pneumonia
- Skin conditions (eczema, dry skin)
- Visual problems: (strabismus, keratoconus, cataracts)

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## SDAT in DS

**Age Range: Range of Reported Incidence of Alzheimer Disease Among Persons with Down Syndrome**

- 40 – 49 years old: 10 - 25%
- 50 – 59 years old: 20 - 50%
- Over 60 years old: 60 - 75%

\*However, SDAT not in all persons w/ DS!

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## YouTube: Garth Home Society

- In Victoria, B.C.
- [http://www.youtube.com/watch?v=k\\_x9zJyQzu8](http://www.youtube.com/watch?v=k_x9zJyQzu8)

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## DS & Az

- DVD clip => 7:22-8:50
- New resource for screening:  
<http://aadmd.org/ntg/screening>

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## Case presentation

Ideas?

- [illegible]

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## Behavioral phenotype

- Down Syndrome
- Autism: 10 %
- Depression: 6-11 %
- Bipolar disorder: rare
- Early onset dementia, approx 30 yrs before the general population
- Overall rate of Psych dx: 11-19 %

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Recognizing dual diagnosis

Genetic syndromes and dual diagnosis

SYNDROME	AGGRESSION	SELF-INJURY	ANXIETY DISORDER, PHOBIAS	ALZHEIMER'S DISEASE	DEPRESSION, MANIA, BIPOLAR DISORDER		SCHIZOPHRENIA
SP	X	X					
Prader-Willi	X	X	X		X		
William	X		X		X		
Smith-Magenis	X	X					
Lesch-Nyhan		X					
Turner			X				
Fragile X		X	X		X		
22q11 deletion (velocardiofacial)					X		X
Down			X	X	X		
Cornelia de Lange		X					

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## Depression



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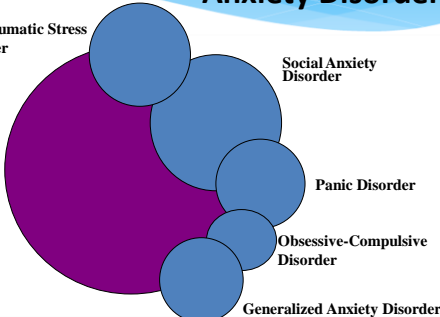
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## Spectrum of Depression and Anxiety Disorders



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## DSM-IV

- **Mood disorders**
  - Major depressive disorder
    - For 2 weeks + 4 other symptoms
  - Dysthymia
    - Depressive mood most of the time
    - For > 2 years
    - Does not meet criteria for major depression

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## S/S of Depression

- Depressed mood
- Anhedonia
- Alterations in eating, sleeping & activity levels
- Feelings of worthlessness or guilt
- Difficulty with memory, concentration & decision-making
- Recurrent thoughts of death & self-harm



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## DSM-IV Criteria for Major Depression and Behavioral Equivalents in Individuals with Developmental Disabilities

Five or more of the following symptoms must be present for a minimum of 2 weeks.  
Symptoms 1 or 2 must be one of the five

DSM IV Criteria	Observed Equivalents in Individuals with Developmental Disabilities	Objective Behaviors Which Might be Measured
1) Depressed Mood, irritable mood in children or adolescents	Apathetic facial expression with lack of emotional reactivity, irritability, somatic complaints	Measure rates of smiling response to preferred activities, crying episodes, somatic complaints
2) Generalized decrease in interest or pleasure by self-report or observed apathy	Withdrawal, lack of reinforcers, refusal to participate in previously favored activities	Measure time spent in room, etc.
3) Significant decrease in appetite or weight loss (5% body weight in one month) or significant increase in appetite or weight gain (5% body weight in one month)	Significant increase or decrease in weight (5% in one month) Significant increase or decrease in appetite (daily)	Measure meal refusals, changes in weight, food stealing or hoarding
4) Insomnia or hypersomnia	Change in total sleep time	Use sleep chart to record sleep

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 <b>DSM-IV Criteria for Major Depression and Behavioral Equivalents in Individuals with Developmental Disabilities</b>		
DSM IV Criteria	Observed Equivalents in Individuals with Developmental Disabilities	Objective Behaviors Which Might be Measured
5) Psychomotor activity or retardation	Agitation may present SIB or aggression, pacing, running away, restlessness, inability to complete ADLs	Time spent in bed, spontaneous verbalization, pacing
6) Fatigue or loss of energy	Retardation may represent as decreased energy, passivity	Napping at workplace, sleep charts
7) Feelings of worthlessness/ inappropriate guilt	Statements such as, "I'm Retarded", "nobody likes me"	Requires expressive language if symptoms are present
8) Decreased concentration/ indecisiveness/ diminished ability to think	Change in workplace performance, regression of skills	Use workplace performance data
9) Recurrent thought of death/ suicidal ideation	Perseveration on the deaths of family members and friends, preoccupation with funerals, deliberately potentially lethal acts, SIB	Requires expressive language to determine if symptoms are present

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## Depression: pearls

- COMMON MEDICAL PROBLEMS may provoke depressive symptoms, for example, UTIs, AOMs, cellulitis, constipation, GERD, migraines, & SE of Rx
- The impact of stressful life events such as staffing changes might provoke an intense reaction!

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## Interventions

- SUICIDAL PRECAUTIONS
- Symptom Surveillance (severity, efficacy of Tx, recurrence)
- Encourage participation in ADLs (w/ assistance & encourage autonomy)
- Regular physical activity
- CBT (thoughts +)
- Staff training/education
- Medications: antidepressants (SSRIs)
- NICE guidelines, 2009

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## Psychotropic Medication Classes

### Antidepressants

(Tx: Panic disorder, OCD, social phobia, bulimia)

- Selective serotonin reuptake inhibitors

Fluoxetine (Prozac), paroxetine (Paxil), sertraline (Zoloft), fluvoxamine (Luvox), citalopram (Celexa)

- Novel antidepressants

Venlafaxine (Effexor), Nefazodone (Serzone), Moclobemide (Manerix), Bupropion (Wellbutrin)

- Tricyclic antidepressants

Amitriptyline (Elavil), Imipramine (Tofranil), Sinequan (Doxepin), Clomipramine (Anafranil)

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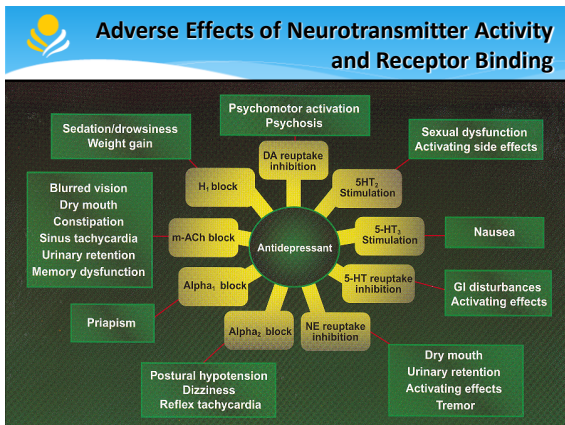
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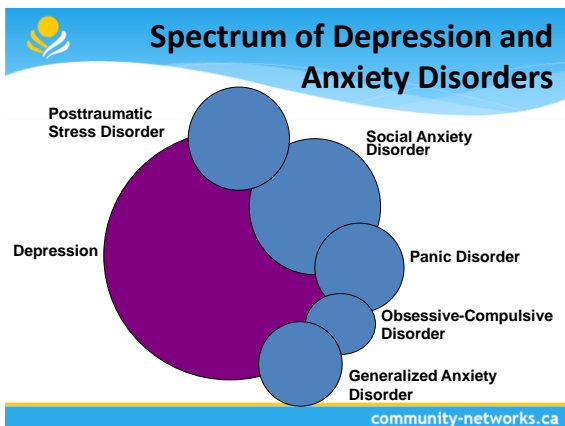
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 **SSRIs, SNRIs, etc**

**Antidepressants**

- Selective serotonin reuptake inhibitors

GAD  
Panic disorder  
OCD  
Social phobia  
Bulimia



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 **SSRIs, SNRIs, etc**

- Novel antidepressants

Desvenlafaxine (Pristiq), Venlafaxine (Effexor),  
Duloxetine (Cymbalta)  
Bupropion (Wellbutrin)

- Tricyclic antidepressants

Amitriptyline (Elavil), Imipramine (Tofranil), Sinequan  
(Doxepin), Clomipramine (Anafranil)

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 **Anticholinergic Side Effects**

- Blurry vision
- Nasal congestion
- Dry mouth
- Urinary retention
- Constipation\*

(\*deaths with Clozapine)



Rx : tricyclic antidepressants, antipsychotics

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## Serotonin Syndrome & Discontinuation Syndrome

- Serotonin syndrome
  - Within 24 hours of start or increase (or additional Rx)
  - S/S: nausea, diarrhea, chills, sweating, dizziness, fever, increased BP, palpitations, increased muscle tone & twitching, tremor, hyperreflexia, restlessness, agitation, disorientation, confusion (muscle breakdown, coma & death!)
- Withdrawal/discontinuation syndrome
  - Within 1-7 days of abrupt D/C & for up to 3 weeks!
  - S/S: asthenia, dizziness, H/A, insomnia, tinnitus, N & V, irritability, disorientation, confusion, agitation, nightmares/vivid dreams, electric-shock sensations, chills, cramps, diarrhea

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## Case presentation

Ideas?

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## Menopause in I/DD

- End of menstruations may uncover feelings of grief & loss of not ever having children
- **S/S can include:** night sweats, hot flashes, mood swings, insomnia, vaginal mucosal changes, increased risk of UTIs, muscle aches & pains, H/A, dry mouth or eyes, dry itchy skin, poor memory & concentration

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## Case presentation

Ideas?

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## Fragile X

- Tactile sensitivity & defensiveness
- Hyperextensible joints, flat feet
- Recurrent otitis in childhood
- Strabismus (30-56%)
- Scoliosis, hernias
- Epilepsy (13% -50%)
- Mitral valve prolapse (55%), cardiac murmurs, hypertension
- Hypotonia, poor muscle tone in childhood
- Shyness, anxiety, ADHD

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## FXS: monitoring

- GERD
- Connective tissue: pes planus, hyperflexibility
- Echocardiogram
- Vision & hearing assessments (ophthalmology & ENT)
- Speech & language, OT, PT

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## Addendum – autism and Sensory OVERLOAD

See YouTube video made by someone with  
Autism at:

<http://www.youtube.com/watch?v=BPDTUotHe0>

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## Behavioral phenotype

- FragileX Syndrome
- Males
  - Autism (50 %)
  - ADHD
  - Social Anxiety
  - SIB (58 %)
- Females
  - Social Anxiety
  - Depression
  - Autism (20 %)
  - SIB (17 %)

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## Sensory Issues

- Tactile hyposensitivity & proprioception
  - Deep pressure, squeeze machine, weighted vest
- Tactile hypersensitivity
  - Touch (clothes, tags, soft touch, etc)
- Altered sensory perceptions  
(synaesthesia ex: colored hearing)

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## Perception is Reality!

“There are no bizarre behaviors – more accurately, there are human responses that are not fully understood or appreciated.”

Carol Gray, 2007

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## Sensory Interventions

- Sensory integration / sensory diet
  - Compressions (trampoline)
  - Swing use
  - Snoezelen room
- Music therapy

A. Eustace, OT &  
R. White, MT, Nfld

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## Snoezelen Room

- Combines lights, bubbles, colours, soothing music and ambient sounds, textures, aroma, and vibration to create a multi-sensory environment that is both relaxing and stimulating
- Main goal is to help calm the individual & promote relaxation by allowing them to enjoy the sensory stimulation
- Used with persons with dementia but also with persons with autism & developmental disabilities

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## Resources

- Building Bridges through Sensory Integration by Ellen Yack, et al. (\$36.95)
- Ocean Drum
- Tangle
- Cool Bananas CD (\$24.95)

A. Eustace, OT &  
 R. White, MT, Nfld

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## Psychiatric concerns in ASD

- Anxiety
- Depression
- Risk of suicide?
- SIB
- OCD?
- Aggression & behavioural outbursts or meltdowns

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## Resources

- Social scripts, social stories by Carol Gray
- The Incredible 5-point Scale by Kari Dunn Buron & Mitzi Curtis (\$24.95)
- The 5-point Scale & Anxiety Curve Poster by Kari Dunn Buron (\$29.95)
- Relaxation & breathing exercises
- (Geneva Center)

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## DSM-IV

- Anxiety disorders
  - Panic attacks
    - Intense anxiety
  - Agoraphobia
    - Anxiety related to situations or avoiding situations
  - Phobias
    - Anxiety provoked by certain objects
  - Obsessive-compulsive disorder
    - Obsessions
    - Compulsions (rituals that decrease anxiety)

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## PANIC DISORDER

- Presence or hx of recurrent, unexpected panic attacks that do not have underlying chemical or medical etiology
- Involves extreme apprehension or fear, associated with feelings of impending doom or terror
- Panic attack: starts abruptly & reaches peak within 10 minutes
- Often think they're having MI (s/s similar: SOB, RSCP, 'doom', sweating, tachycardia, shaking, nausea, dizziness, fear of going crazy/dying, chills/hot flashes, paresthesias, choking/smothering feeling)

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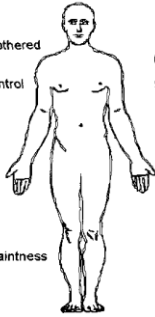
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## DSM-IV Criteria: Recurrent Panic Attacks

4 or more of the following

- Dyspnea or the sensation of being smothered
- Depersonalization or derealization
- Fear of going crazy or of losing self-control
- Fear of dying
- Palpitations or tachycardia
- Sweating
- Trembling or shaking
- Feeling of choking
- Chest pain or discomfort
- Nausea or abdominal upset
- Dizziness, feeling of unsteadiness or faintness
- Numbness or tingling sensation
- Flashes or chills



**Cognitive symptoms**

**Physical symptoms**

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## DSM IV-R CRITERIA

Both:

- Recurrent panic attacks
- At least one of the attack followed by 1 month of persistent concern of another attack, worry about going 'crazy'/having MI, losing control
- Absence or presence of agoraphobia (fear of being alone in open or public places where escape might be difficult, so much so that the person may not leave home)
- Panic attacks not due to Rx/ETOH, or a medical or mental disorder (phobia/PTSD)

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## Anticipatory anxiety

One or more of the following for at least one month:

- Persistent concern about having another panic attack
- Worrying about the consequences of an attack (e.g. heart attack)
- Significant change in behaviour due to recurrent panic attacks



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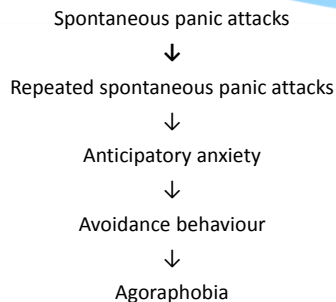
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## Development of Panic Disorder



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## Panic Disorder

- Prevalence in general population = 20%
- Age of onset = mid 20s
- Family Hx of panic attacks can show 10% co-morbidity
- Hx gathering is determining factor in Dx (PTSD vs Panic disorder)
- CBT very effective Tx, often with Rx
- Coffee, ETOH, cigarettes, & certain drugs or food may contribute to the refractory aspect of panic disorder

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## Panic Attack: Pearls

- Most symptoms of panic attacks can be seen in PWIDD, except for depersonalization (due to cognitive functioning level)
- In persons with severe/profound developmental disabilities, extreme panic can be manifested as aggression or SIB

(DSM-ID, p.191)

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## Tx – Panic disorder

- Rx: SSRIs & benzos
- Therapy
  - CBT: info on anxiety & panic, cycle, S/S management, cognitive restructuring, systematic desensitization, in vivo exposure
  - BT
  - Relaxation techniques
  - Breathing techniques

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## PHOBIAS

- Irrational fears of an object or situation even **tho'** pt recognizes them as unreasonable
- Three types: agoraphobia, social phobia (public speaking, performing) & specific phobias (snakes, flying, heights)
- Physical symptoms include:
  - Profuse sweating
  - Poor motor control
  - Tachycardia
  - Increased blood pressure

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## Tx - Phobias

- Rx: treat panic attacks as mentioned
- Therapy
  - CBT: info on anxiety & panic cycle, S/S management, cognitive restructuring, systematic desensitization, in vivo exposure
  - BT
  - Insight-oriented Tx
  - Self-hypnosis
  - Biofeedback
  - Relaxation techniques
  - Breathing techniques

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## Obsessive Compulsive Disorder

- **Obsessions:**  
Persistent ideas, thoughts, impulses, or images that are experienced as intrusive and inappropriate that cause marked anxiety or distress
- **Compulsions:**  
Repetitive behaviours (e.g. hand washing, ordering, checking) or mental acts (e.g. praying, counting, repeating words silently) the goal of which is to prevent or reduce anxiety or distress, not provide pleasure or gratification
- **Disorder:**  
A clinically significant behavioural or psychological syndrome or pattern that occurs in an individual and that is associated with present distress (e.g. a painful symptom) or disability (e.g. impairment in one or more important areas of functioning) or with a significantly increased risk of suffering death, pain, disability, or an important loss of freedom
- (DSM-IV, APA, 1994)

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Common Compulsions	Common Obsessions
Checking Washing * Counting* Need to ask/ confess Hoarding  <small>* Occurrence lower among PWDD, DSM-ID, p.211</small>	Fear of contamination* Pathologic doubt* Somatisation* Need for symmetry Aggressivity Sexuality  <small>*Occurrence much lower in PWDD, due to cognitive level &amp; limited abstract thinking, DSM-ID, p.209</small>

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### Pharmacotherapy for Obsessive-Compulsive Disorder

- First-Line
  - SSRI's
- Second-line
  - Clomipramine
- Considerations
- Higher mean doses
- Delayed onset of response
- Residual symptoms common
- Often long-term (maintenance)

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### OCD: Pearls

- Repetitive behaviors with physiologically rewarding properties should not necessarily be considered compulsions  
(ex. : masturbation, hyperventilation, overeating, overdrinking, smoking, *humming*, pacing)
- SCB, such as aggression or SIB, may occur if the person is prevented from completing the compulsion!

DSM-ID, p.210 & 213

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Pharmacologic Management of OCD			
Drug	Dose Range (Frequency)	Target Symptoms	Common Adverse Effect
Clomipramine	10-300 mg/d (qhs)	Obsessions, compulsions, ADHD, Nocturnal enuresis	Dry mouth, blurred vision, constipation, sexual dysfunction, orthostatic hypotension
Fluoxetine	10-80 mg/d (qam)	Obsessions, compulsions	Insomnia, nausea, headache, agitation, sexual dysfunction
Fluvoxamine	50-300 mg/d (qhs or bid)	Obsessions, compulsions	As above
Sertraline	50-200 mg/d (qam or bid)	Obsessions, compulsions	As above
Paroxetine	10-40 mg/d (qam or bid)	Obsessions, compulsions	As above
Citalopram	10-40 mg/d (qam or bid)	Obsessions, compulsions	As above

From Sandoz P. (1995). Pg. 580 community-networks.ca

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### Non-Pharm approaches to OCD

- Divert & redirect attention
- "Sensory" box or bag
- Interrupting w/ strong sensory stimuli
- Try finger-play w/ person to divert
- "grounding" : "touch my arm/hands"

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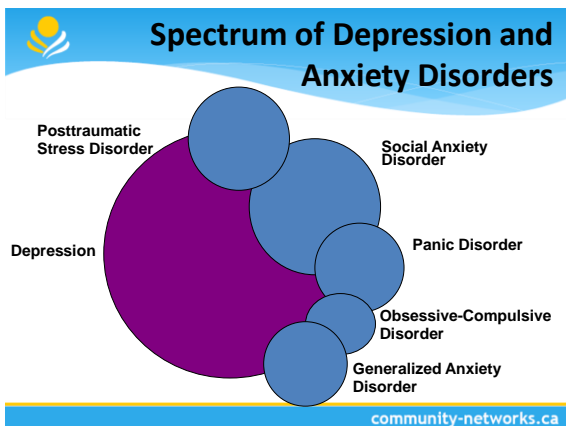
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## DSM-IV

- PTSD (post-traumatic stress disorder)
  - Reliving a traumatic incident
  - avoiding stimuli associated with the trauma
- GAD (generalized anxiety disorder)
  - Persistent & excessive anxiety
  - Six months

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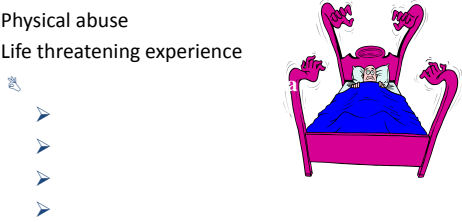
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## Diagnostic Criteria for PTSD (DSM IV)

- Exposure to a traumatic event
  - Sexual abuse
  - Physical abuse
  - Life threatening experience



to trigger

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## Diagnostic Criteria for PTSD (DSM IV)

- **Increased arousal**
  - Difficulty falling asleep
  - Irritability
  - Difficulty concentrating
  - Hypervigilance/Exaggerated startle response
- **Emotional numbing**
  - Diminished interest/participation in significant events
  - Restricted range of affect
  - Avoidance behaviour

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## PTSD in Individuals with Developmental Disabilities

### Presentation

**Explosive aggression/self-injurious behaviour (SIB)  
in response to unusual or  
difficult to identify antecedents**

#### ♦ Screaming

- May assume self-protective stance
- At people not present
- Triggered by smells, places, people or sounds
- May worsen if individual is being overpowered

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## PTSD in Individuals with Developmental Disabilities

- Calling familiar staff by different names
- Attacking favorite staff members
- SIB
- Sleep disturbances



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## PTSD in Individuals with Developmental Disabilities

- Hyper vigilance
  - Individual will know everything about environment to ensure optimal safety
- Flashbacks
  - Dissociation

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## Treatment Overview

- Appropriate psychotherapy
- Judicious use of medications
- Habilitation changes to minimize dissociative triggers

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## Clinical Treatment

### Psychotherapy

- Focus on 3 Stages of Recovery
  - Establishing Safety
  - Reconnection with Others
  - Reconstruction of the Trauma



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## Clinical Treatment

### Pharmacotherapy

- Treat target symptoms
- Treat co-morbid disorders
- Avoid exposure to drugs interfering with recovery

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## Treatment

### Indicators of Improvement

- **Symptomatic**
  - Sleep improvement
  - Mood change
  - Decrease frequency/intensity of SCB
- ♦ **Interpersonal**
  - Cognitive self-representation
  - Appropriate interactions with others
  - Ability to form trusting & reciprocal relationships

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## Clinical Treatment

### Indicators of Improvement

- **Vocational**
  - Increased work productivity
  - Improved concentration



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## Generalized Anxiety Disorder (GAD)

- Excessive anxiety/worry persisting for 6 months
- Uncontrollable worrying
- Anxiety associated with 3+ of the following:
  - Restlessness, feeling keyed-up
  - Easily fatigued
  - Irritability
  - Difficulty concentrating, mind goes blank
  - Muscle tension
  - Sleep disturbance
- Anxiety or physical s/s that cause significant impairment in social/occupational/other areas
- Disturbance not d/t substances, medical, PDD or psychiatric disorder

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## Rationale for Antidepressant Use in Generalized Anxiety Disorder

- GAD is comorbid with major depression in 62% of cases
- Clinical goal: treat both anxiety and depression
- When you see the anxiety, don't miss the depression
- When you see the depression, don't miss the anxiety

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## Tx - GAD

- **Rx:**
  - SSRIs (Paxil)
  - Benzos (short-term only)
  - Buspar
  - TCAs (imipramine)
- **Therapy**
  - CBT
  - BT

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## Summary of Interventions (1)

- Structure environment (+ rituals)
  - predictability
- Reduce stressors
  - Observe for « agitation »
- Teach the person coping strategies
  - Increase tolerance to anxiety provoking situations
  - Increase his/her control of the situation

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## Summary of Interventions (2)

- Gradual exposure to anxiety provoking stimuli
  - Reduce uncomfortable physiologic symptoms
- Medication (alone or combination Tx)
  - SSRIs, benzodiazepines, anxiolytics
- Psychotherapy :
  - Cognitive behavioral therapy (CBT)
  - Cognitive distortions & behavior

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## Summary of Interventions (3)

- Relaxation Techniques
  - Active & (passive)
- Self-control Techniques
  - Self-talk
  - Cue cards
  - Move to a calm environment
- Physical activity
- Communicate feelings of anxiety to others

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## Psychotropic Medication Classes

### Benzodiazepines

Target psychomotor agitation, anxious and fearful affects, and have a calming or sleep-inducing effect

Examples include:

- Lorazepam (Ativan),
- Diazepam (Valium),
- Oxazepam (Serax),
- Alprazolam (Xanax),
- Clonazepam (Rivotril),
- Midazolam (Versed)

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## Psychotropic medications

- **Onset of action** - time required for medication to have an optimal effect.
- **Duration of action** - determines appropriate dosing intervals (minimum time between doses of the medication).
- **Therapeutic range** - level of medication in the blood & brain achieved over a period of time by prescription of a specific dose of medication. This range is characterized by:
  - a *therapeutic threshold* below which the drug has a suboptimal effect
  - a *toxic threshold* above which adverse effects increase in the absence of any further positive effects

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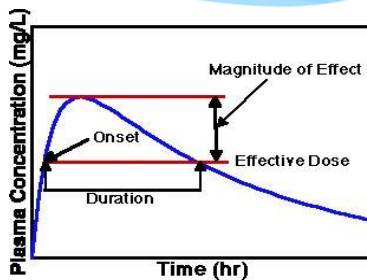
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## Absorption

**Therapeutic Window**



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## Use of Benzodiazepines

- Useful in many patients but not recommended first-line
- Use only for short periods of time (less than 4 months)
- Side effect profile
  - Sedation
  - Reduced coordination
  - Increased risk of falls
  - Impaired cognition
- Risk of dependency/tolerance
- Withdrawal symptoms/rebound anxiety

**\*\***(decrease gradually: 10 - 25% every 1 - 4 weeks)



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Benzodiazepines	
Class	Drug
1. Long half-life (>13hrs) & high potency	Clonazepam (Rivotril) Clobazam (Frisium) (*AED)
2. Long half-life (>13hrs) & low potency	Chlordiazepoxide (Librium) Diazepam (Valium) Flurazepam (Dalmane) Nitrazepam (Mogadon)
3. Short half-life (<13hrs) & high potency	Lorazepam (Ativan) Alprazolam (Xanax)
4. Short half-life (<13hrs) & low potency	Oxazepam (Serax) Temazepam (Restoril)

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Indications for the Use of Benzodiazepines		
ESTABLISHED INDICATIONS	PROBABLE INDICATIONS	POSSIBLE INDICATIONS
<ul style="list-style-type: none"> <li>Panic disorder</li> <li>GAD</li> <li>Social phobia</li> <li>Mania/excited schizophrenia</li> </ul>	<ul style="list-style-type: none"> <li>Adjustment disorder with anxiety</li> <li>Acute stress-related insomnia</li> <li>Circadian rhythm disturbances</li> </ul>	<ul style="list-style-type: none"> <li>Akathisia</li> <li>Tourette syndrome</li> <li>Severely excited states (ER)</li> </ul>

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Rx for ADHD	
<b>Stimulants</b> <ul style="list-style-type: none"> <li>Ritalin/Concerta / Methylphenidate</li> <li>Dexedrine Dextroamphetamine</li> <li>Adderall/ amphetamine salts</li> </ul>	
SNRI : <i>Selective NE Reuptake Inhibitor</i> <ul style="list-style-type: none"> <li>Strattera/ Atomoxetine</li> </ul>	
Adrenergic <ul style="list-style-type: none"> <li>Clonidine</li> </ul>	

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## Stimulants

- Take effect within the first week (without mood/anxiety dx)
  - 75 % children
  - 25-78 % adults
- Can increase anxiety
- Should be taken with or after meals
- Dosage q. 2 – 6 hSE: anorexia (↓wt), abdominal pain, insomnia, irritability, sadness, can increase tics & induce psychotic episodes
- (rare)
- Check P, BP with ↑ dose

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## Side effects – Stimulants

- Nervousness, irritability
- Insomnia
- Anorexia & weight loss (\*growth may be effected)
- Headache
- Hypertension, tachycardia
- Tics
- Dry mouth, blurry vision

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## Strattera: Atomoxetine

- Blocks recapture of NE (↑attention, ↓impulsivity, activity)
- With/without meals
- Takes effect in **4 weeks**
- No withdrawal symptoms noted
- SE: headache, N & V, abdominal discomfort, anorexia (weight loss), labile mood, fatigue
- Precautions: hypertension, cardiovascular disease, hypotension, liver disorders, glaucoma

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## Side effects - Strattera

- N & V, abdominal discomfort
- Loss of appetite
- Headache, dizziness
- Insomnia
- Fatigue, lethargy
- Anticholinergic side effects
- Irritability, aggressiveness
- Palpitations
- Sexual dysfunction

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## Naltrexone

- Opiate Antagonist (blocks the sites)
- Used in severe cases of SIB  
( & in alcoholism )

### SE:

N & V, abdominal discomfort, weight loss, insomnia, anxiety, depression, confusion, fatigue, headache, rare cases of panic attacks.

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## Co-morbidities in PWIDD

- **Have higher rates** of some health problems [e.g.: seizures (25x); GERD; constipation; sensory impairments; obesity, behavioural and mental health problems]
- **Have earlier onset** (e.g., osteoporosis, dementia)
- **Have different symptoms** (e.g., dysphagia)
- **Have complicating factors** (e.g., multiple and long-term medications)
- **Have vulnerabilities** (e.g., abuse, infections) (People with ASD – vulnerability to sensory stimuli)
- May have **musculoskeletal and motor problems** affecting office access; use of equipment

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## INDIVIDUALIZED Treatments!

- Non pharmacological
- Multimodal approach
- Decrease stress / anxiety:
  - Sensory
  - Environmental modifications
  - Staff support & training
- Communication aids
- CBT , Psychotherapy
- Pharmacological
- Antidepressants
- Mood stabilizers
- Benzodiazepines
- Anxiolytics
- Antipsychotics
- Stimulants
- Monitoring side effects!

O'Hara, et al., 2010, Chapter 16

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## Monitoring of side effects

- Medication side effect monitoring
- MOSES
- SSRI side effect monitoring tool

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## To consider... (Ryan, 2001)

- Challenging behavior (CB) may indicate a health problem (physical or mental)
- These same CBs may mean different things at different times
- EVERY CB means something!
- Pain that you can control is preferable to pain that is out of control!
- Often, our clients have learnt NOT to complain (M\*)

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## Intensive Evaluation needed!

- Data collection: many aspects!
- Taking a thorough history
- Review of systems
- Physical exam
- Investigations

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## Challenges – Survey of PCP's

### True or False:

1. I have the necessary **skills and training** to care for an adult with DD.
2. During a typical office visit there is **adequate time** to perform an assessment of an adult with DD.
3. There are sufficient resources and I can easily **access interdisciplinary input** in my community to support me in providing medical care to adults with DD.

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## Supports in Ontario

For PCP's & caregivers working w/ people with DD:

- [Guidelines, Tools & Education Module](#)
- CNSC (Coordinators: Sophie Lamontagne (ENG) & Tanya Viner (FR))
- Health Care Facilitators (HCF : Liz Kacew)
- DSO's (July 2011)
- CAMH Website (July 2011)
- [http://www.camh.ca/en/hospital/health\\_information/a\\_z\\_mental\\_health\\_and\\_addiction\\_information/dual\\_diagnosis/Pages/default.aspx](http://www.camh.ca/en/hospital/health_information/a_z_mental_health_and_addiction_information/dual_diagnosis/Pages/default.aspx)
- DDPCI Training Course
- DDPCI Clinical Support Networks

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## What the psychiatrist will need to know...

- Demographics
- Chief complaint or reason for referral
- Family history
- Current medications
- Medication history
- Medical history including recent labs

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## What the psychiatrist needs...

- |                                   |                   |
|-----------------------------------|-------------------|
| • Prior reports                   | <b>Behaviour:</b> |
| • Previous diagnosis, assessments | o Patterns        |
| • Developmental history           | o Duration        |
| • Psychological info              | o Frequency       |
| • Social information              | o Intensity       |
|                                   | o Baseline        |

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## Let's take a closer look... W 5

Who ?  
What ?  
When ?  
Where ?  
Why ?

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## Caregiver's Role

- Observe for particular signs
  - Grimacing
  - Body posturing/positions
  - New posture
  - Change in regular habits/behaviours
- Note observations & tabulate data
  - charts
    - Sleep, food diary, weight
    - Pain scale/checklist
    - Side effects of meds
- Precision!

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## Special concerns

- KNOW YOUR PT: Baseline lab values!
- PMHx
- HPI
- Behavior changes, concerns
- Think outside the box, too!  
(Insomnia Tx: socks!)
- Syndrome specific care!

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## Tools

- F/U sheet for clinic
- A-B-C sheets
- Scatterplot
- Pain assessment: NCAPC
- Sleep chart/ sleep hygiene
- Side effects of meds
- Food diary
- Bristol stool chart for BM monitoring
- Sz records
- Dementia screening

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## Questions (for caregiver to ask)

- Why do you recommend this treatment?
- How can we tell if things are getting better?
- What are the risks of this treatment?
- What should we do if side effects occur?
- What information do you need for the next appointment?
- When should we call you?
- Are there any checklists or scales that we could use?
- Are there any lab tests that need to be done?
- When should we schedule another appointment?

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## IMPORTANT things to do

- Bring data collection with you
- Send a familiar staff member with the client: to help keep him calmer & for best source of information
- Come to the appointment with historical information
- Bring information from multiple settings (work & home)
- Follow through with recommendations
- Be specific, avoid: "Joe's not himself" "He seems worse than before" "He's having mood swings". Bring videos or photos of events
- Bring lab slips & other investigations

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## A Good Informant Knows

- What the target symptoms are
- What the proposed treatment is supposed to do
- What side effects (SEs) to look for
- When to report Ses
- Use charts and other data collection systems
- Good information is **everything:**  
**garbage in...**  
**=> garbage out!**

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## Questions ?

*Please complete and return Training Evaluation form*

*Thank you!*

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