## P.I.E.C.E.S. Psychotropic Template

### Three-Question Framework for Selection and the Detection, Monitoring the Use, Risk, and Benefits of Psychotropics

1. When should a psychotropic be used or considered?
2. How do I select the right medication?
3. How do I monitor the response and side effects (with person, family, providers)?

<table>
<thead>
<tr>
<th>CLASS</th>
<th>Preferred choices, starting doses</th>
<th>Side Effects</th>
<th>Notes &amp; max. recomm. doses</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSRI</td>
<td>Citalopram (10 mg), Escitalopram (5-10 mg), Setraline (25 mg): preferred</td>
<td>Headache, Agitation, Nausea, Diarrhea, Sweating, Somnolence</td>
<td>Watch for suicidal risk when “energy” increased but still despondent. Max. recommended dose: 300 mg daily</td>
</tr>
<tr>
<td></td>
<td>Paroxetine, fluoxetine, fluvoxamine: more common or severe drug interactions; prolonged side effects with fluoxetine</td>
<td>Monitor for hyponatremia. Anticholinergic effects: paroxetine</td>
<td></td>
</tr>
<tr>
<td>SNRI</td>
<td>Venlafaxine (37.5 mg)</td>
<td>Headache, nausea, elevated BP in higher doses.</td>
<td>Not for use with persons with liver disease and/or severe kidney problems, uncontrolled glaucoma. Watch for drug-drug interaction (i.e. not with fluvoxamine, MAOI some antibiotics i.e. Cipro etc)</td>
</tr>
<tr>
<td></td>
<td>Duloxetine (Start dose 30 to 60 mg)</td>
<td>Dry mouth, Appetite loss, Nausea, Constipation</td>
<td></td>
</tr>
<tr>
<td>NASA</td>
<td>Mirtazapine (15 mg)</td>
<td>Dry mouth, drowsiness, weight gain, dizziness: mild anticholinergic activity</td>
<td>Weight gain can be substantial. Maximum recomm. Dose: 45 mg</td>
</tr>
<tr>
<td>NDRI</td>
<td>Bupropion (100 mg)</td>
<td>Seizures, Headache, Agitation, Rash, Emesis, Sleep disturbance</td>
<td>Maximum recommended dose: 150 mg BID</td>
</tr>
<tr>
<td>SARI</td>
<td>Trazodone (25-50 mg)</td>
<td>Drowsiness and orthostatic hypotension</td>
<td>Used more for sedation than for antidepressant effect. Effects last approx. 4 hours</td>
</tr>
<tr>
<td>RIMA</td>
<td>Moclobemide (150 mg)</td>
<td>Monitor for hypotension. When combined with MAO-B (Eldepryl), MAOI diet/full precautions needed</td>
<td>In doses up to 600 mg per day, no dietary precautions required. Given BID from 300 mg to 600 mg daily</td>
</tr>
<tr>
<td>STIMULANT</td>
<td>Methylphenidate (5 mg in morning)</td>
<td>Cardiovascular risks: high BP, agitation, sleeplessness</td>
<td>Usually not a first line treatment</td>
</tr>
<tr>
<td>TRICYCLIC</td>
<td>Avoid most TCAs, Nortriptyline or Deipramine may be considered in treatment resistant depression</td>
<td>**(C)**ardiovascular: Orthostatic hypotension (dizziness), falls, ↑ pulse rate</td>
<td>Usually not a first line treatment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Anti**(C)**holinergic: Urinary retention, constipation, dry mouth, blurred vision</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>**(C)**onfusion: Monitor with the C.A.M.</td>
<td></td>
</tr>
</tbody>
</table>

*Important Note:* Withdrawal symptoms are associated with many psychoactives, including SSRIs (flu-like symptoms). The dose must be **reduced slowly** and the status monitored closely.

### Notes & max. recomm. doses

- **HANDS**
- **DANCES**
- **SHARES**
- **3 C's**
- **P.I.E.C.E.S. Psychoactive Template**
### Atypical Antipsychotics – Side Effects to Monitor

<table>
<thead>
<tr>
<th>Common</th>
<th>Newer Antipsychotics – Side Effects to Monitor</th>
<th>Clinical Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Olanzapine</td>
<td>Dizziness, Agitation (early), Somnolence, Hypotension</td>
<td>The clinical factors to monitor include the 7 parameters of delusion:</td>
</tr>
<tr>
<td>Risperidone</td>
<td>May cause weight gain</td>
<td>1. Dangerous, threatening</td>
</tr>
<tr>
<td>Quetiapine</td>
<td>May cause tachycardia, with higher doses – EPS</td>
<td>2. Distressing to self</td>
</tr>
<tr>
<td></td>
<td>Watch for sedation</td>
<td>3. Disturbing to others</td>
</tr>
</tbody>
</table>

#### Advantages of New Antipsychotics
- Less EPS
- Less risk of developing tardive dyskinesia
- Less cognitive effects
- May stabilize mood

#### Cautions
- Lipid increases
- Insulin resistance (glucose changes)
- Weight gain
- Potential cardiovascular events

### Clinical Response

#### Newer Antipsychotics

- **Olanzapine**
- **Risperidone**
- **Quetiapine**

#### Traditional antipsychotics or neuroleptics

- **High potency**
  - Haloperidol
  - Constriction: EPS: rigidity, tremors, showed movements, drooling, leaning to one side, parkinsonian gait and falls
  - May cause weight gain

- **Mid potency**
  - Loxapine, Perphenazine
  - Less EPS but more anti-cholinergic than haloperidol

- **Low potency**
  - Chlorpromazine
  - Anti-Cholinergic side effects, Confusion, Cardiovascular side effects
  - In general, should be avoided

### If it is an anxiolytic, what class is it?

#### Benzodiazepine
- Lorazepam, Oxazepam, Alprazolam, Temazepam, Clonazepam
  - Confusion and memory problems, ataxia (poor balance) and falls, disinhibition leading to inappropriate or aggressive behaviour
  - Decreased agitation and anxiety
  - Rapid response within 1-2 hours
  - Best in panic attacks or catastrophic reactions

#### Mood stabilizers

- **Lithium Carbonate**
  - Ataxia and falls, confusion, weakness, diarrhea usually when serum level is greater than 0.8 mmol/L some GI upset in early treatment. Polyuria, tremor may occur at therapeutic doses. Maintain serum levels between 0.4 to 0.7 mMol/L
  - Stabilization of mood and behaviour within 2-4 weeks at therapeutic dose/level
  - Mostly used when previous recurrent mood disorder, particularly bipolar illness

- **Antiepileptic**
  - Na Valproate, Carbamazepine, Lamotrigine
  - Sedation, ataxia, nausea; if there is bruising or bleeding of any type, call physician. Check if drug levels and blood work done regularly (liver, hematolgy). Watch for rashes particularly with Lamotrigine.
  - May be considered in lability of mood and behavioural problems in dementia

### Drugs to treat Dementia

#### Cholinesterase inhibitors
- Donepezil, Rivastigmine, Galantamine
  - Muscle cramp, Insomnia, Nausea, Diarrhea and weight loss
  - Slow pulse, heart block, peptic ulcer
  - Improve or prevent decline in ADLs, Behaviour, Cognition, and Decrease caregiver time (ABCD)

#### Cognitive Enhancers (Potential Problems)

- Breathing Problem
- Seizures
- Nausea and peptic ulcer
- Low pulse (bradycardia)

#### Glutaminergic agent

- **Memantine**
  - Indicated for moderate to severe dementia
  - Confusion, Headache, Equilibrium, Constipation, Kidney function
  - Cognition - improved
  - Socialization – improvements
  - Household tasks
  - ADLs - improved function
  - Persecutory thoughts decreased
  - Excessive activity/irritability decreased
  - Caregiver time saved