Off-label Use of Psychotropics

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Define off-label prescribing, identify the role of the Food and Drug Administration (FDA) as well as legal liability.

Describe common off-label use of psychotropics in clinical practice, contraindications, side effects.

Follow-up questions
Off-label use of FDA-approved drugs

- Prescribed for a different disease or medical condition.
- Given in a different way (such as by a different route).
- Given in a different dose.

Off-label prescribing lacks formal, lengthy, and often costly studies required by FDA to officially approve the drug for new uses.

FDA (2016)
Off-label use of FDA-approved drugs

If indication is not approved in labeling:

- Our responsibility to be well-informed about the product
- Firm scientific rationale and medical evidence
- Document the product's use and effects

FDA (2016)
Clinical guidance

Off-label use of antipsychotics

Retrospective analysis of administrative data from 42 state Medicaid programs (n=372,038).

214,113 (57.6%) received these agents for off-label disorders.

Autism, Borderline Personality Disorder
Agitated dementia, PTSD
Depression, Tourette’s Syndrome
Obsessive Compulsive Disorder
Anxiety, to name a few…

Leslie (2012)
“Thorazine can control the agitated, belligerent senile and help the patient live a composed and useful life.”
Off-label use of antipsychotics

Quetiapine (42.9%)
Risperidone (21.2%)
First-generation antipsychotics (20.5%)
Olanzapine (7.5%)
Aripiprazole (5.9%)
Clozapine (<.1%)

Leslie (2012)
Up to 800 mg\textsuperscript{8}...

...and who knows how many calls to mom?

In 10 days you can administer 600 mg of Seroquel.\textsuperscript{16}

Significant improvement in:
- Positive and negative symptoms\textsuperscript{1,3}
- Cognitive function (p < 0.03 vs haloperidol)\textsuperscript{4}
- Total BPRS\textsuperscript{5} score\textsuperscript{1,3,4}

Titrate with confidence:\textsuperscript{1}
- EPS side effects and prolactin levels comparable to placebo through its dose range (in controlled clinical trials)
- Weight change minimal and dose independent (in controlled clinical trials)

Available strengths:\textsuperscript{1,2}

Seroquel\textsuperscript{1}

Quetiapine

Aim High

Seroquel\textsuperscript{1} and the AstraZeneca logo are trademarks of the AstraZeneca group.
## Insomnia

### Off-Label Medications

<table>
<thead>
<tr>
<th>Medication</th>
<th>Typical Dosages</th>
<th>% Meds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trazodone</td>
<td>25mg-200mg</td>
<td>17.9%</td>
</tr>
<tr>
<td>Amitriptyline</td>
<td>25mg-50mg</td>
<td>14.5%</td>
</tr>
<tr>
<td>Mirtazapine</td>
<td>7.5mg-30mg</td>
<td>5.8%</td>
</tr>
<tr>
<td>Nortriptyline</td>
<td>10mg-50mg</td>
<td>4.7%</td>
</tr>
<tr>
<td>Doxepin</td>
<td>1mg-25mg</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

(>30mg can be activating)

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clinical guidance

Eating disorders

- Binge eating disorder
  Topiramate
  Lisdexamfetamine –recently FDA approved

- Anorexia—to increase appetite
  Olanzapine

- Bulimia
  Odansetron
  Topiramate

Gorla (2005)
Anxiety disorders

- Gabapentin 100mg-300mg tid
- Mirtazapine 7.5mg bid
- Pregabalin up to 300mg
- Propanolol (performance anxiety)
- Quetiapine 25mg bid

Baldwin (2013)
Significant proportion of prescriptions are off-label:

- bipolar disorder—>DO NOT USE
- neuropathic pain—>900-1800mg/day in 3 divided doses
- complex regional pain syndrome—> as above
- trigeminal neuralgia—> as above
- periodic limb movement disorder of sleep—>300mg qhs
- migraines—> start 300mg qhs and titrate up to 1800mg/day
- anxiety—> 100mg-300mg qday to tid
- drug and alcohol withdrawal seizures

Fudaka (2012)
now she can cope...

thanks to

Butisol®
(SODIUM BUTABARBITAL)

“daytime sedative” for everyday situational stress

When stress is situational—environmental pressure, worry over illness—the treatment often calls for an anxiety-allaying agent which has a prompt and predictable calming action and is remarkably well tolerated. Butisol Sodium (sodium butabarbital) meets this therapeutic need.

After 30 years of clinical use... still a first choice among many physicians for dependability and economy in mild to moderate anxiety.

Contraindications: Porphyria or sensitivity to barbiturates.

Precautions: Exercise caution in moderate to severe hepatic disease. Elderly or debilitated patients may react with marked excitement or depression.

Adverse Reactions: Drowsiness at daytime sedative dose levels, skin rashes, “hangover” and systemic disturbances are seldom seen.

Warning: May be habit forming.

Usual Adult Dosage: As a daytime sedative, 15 mg. (3/8 gr.) to 30 mg. (1/2 gr.) t.i.d. or q.i.d.

Available for daytime sedation: Tablets, 15 mg. (3/8 gr.); Elixir, 30 mg. per 5 cc. (alcohol 7%).

BUTICAPS® (Capsules Butisol Sodium [sodium butabarbital]) 15 mg. (3/8 gr.), 30 mg. (3/4 gr.).

McNEIL

Augmenting strategies—PEARLS

Pramipexole—selective D3 receptor agonist
<45yo start 0.25mg qhs, increase q3 days by 0.25 mg increments with a goal of 2mg/day
>45yo start 0.5 mg qhs, increase q3 days by 0.5mg increments with goal of 2.5mg/day

Fawcett (2015)

Prazosin—excellent agent for PTSD hyperarousal, nightmares
Start trial dose of 1mg qhs, then increase by 1mg every 3-5 days at tolerated (therapeutic dose 2mg-15mg)

George (2016)


Leslie D, Mohamed S, Rosenheck, R. Off-Label Use of Antipsychotic Medications in the Department of Veterans Affairs Health Care System Psychiatric Services 2009 60:9, 1175-1181.

