Psychotropic Medications
-a brief review-

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  - **Full time employee of Milwaukee County
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Purpose of this Presentation

- Psychotropic medications are becoming more frequently prescribed
- Many patients you encounter are taking these medications
- While helpful, they are not benign and should be treated with respect
- It is good to have a basic knowledge of them to see their utility (as well as their rampant over usage)
3 Main Questions

- Are all mental illnesses best treated by psychotropic medication? ...... NO

- Are many mental illnesses aided by psychotropic medication? ...... YES

- Are psychiatric medications helpful in purely environmental situations? ...... NOT USUALLY
Psychiatric Meds in the News

- “Black Boxes”
- Metabolic syndromes
- Pregnancy issues
- Increasing suicidality in patients?
- Long term risks?
- Worsening cardiac problems in the elderly

- NOT MUCH ON THE POSITIVE SIDE OF THINGS??
Robert Whitaker

ANATOMY OF AN EPIDEMIC

Magic Bullets, Psychiatric Drugs and the Astonishing Rise of Mental Illness

ROBERT WHITAKER

Author of "Mad in America"
Marcia Angell

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The Truth About the Drug Companies

How They Deceive Us and What to Do About It

Marcia Angell, M.D.
Daniel Carlat
What has been shown to be good?

- MANY THINGS
  - Decreased self harm and violence
  - Protection against brain damage
  - Increased levels of function
  - Decreased Morbidity of both psychiatric and medical illnesses
  - Improvement in cognition and concentration
  - Symptomatic relief in social settings
  - Sleep improvement
So, why all the fuss then?

- Extensive overdiagnosis of illnesses
- Marketing by pharma companies to primary care
- Misuse of meds......combined with AODA
- Often times meds not given in line with the 5 “D’s”
  - Dose
  - Duration
  - Diagnosis
  - Drugs (interactions)
  - Drugs (sobriety)
Antidepressants

- MAO inhibitors – certain diet necessary to avoid blood pressure problems and strokes

- Heterocyclics / Tricyclics – multiple usages in both psychiatry and medicine.......overdose concerns led to ............

- SSRIs

- SNRIs

- “Other”
SSRIs (Selective Serotonin Reuptake Inhibitors)

- Fluoxetine (Prozac, Sarafem)
- Paroxetine (Paxil)
- Sertraline (Zoloft)
- Citalopram (Celexa)
- Escitalopram (Lexapro)
- Fluvoxamine (Luvox)

*Liked due to safety profile and minimal side effects (usually GI and sexual)*

Now may be some longer term issues with osteopenia and GI bleeding
SNRIs (Serotonin Norepinephrine Reuptake Inhibitors)

- Venlafaxine (Effexor)
- Duloxetine (Cymbalta)
- Desvenlafaxine (Pristiq)
- Milnacipran (Savella)
- Levomilnacipran (Fetzima)

- Possibly quicker onset, but more side effects than SSRI

- Suggested for NEUROPATHIC pain

- Does have significant WITHDRAWAL SYNDROME
“Other” Antidepressants

- Bupropion (Wellbutrin, Zyban)......also ADHD, smoking
- Trazodone (Desyrel, Oleptro)......priapism
- Nefazodone (Serzone)..........liver issues
- Mirtazapine (Remeron)......good for sleep
- Vilazodone (Viibryd)......combo of SSRI and buspirone
- Vortioxetine (Brintellix)...........newer multi-receptors

*These are often some of the best to avoid sexual dysfunction (both in arousal and climax)
Mood Stabilizers

- **Gold Standard** = lithium (Eskalith, Lithobid)
  - Side effects (nuisance, renal, thyroid, and “tight” dosing)

- **Anti-Seizure Meds** (varying mechanism)
  - carbamazepine (Tegretol)***
  - gabapentin (Neurontin)........many off label uses
  - lamotrigine (Lamictal)***.......rashes
  - levetiracetam (Keppra)
  - oxcarbazepine (Trileptal)
  - topiramate (Topamax)............cognitive problems
  - valproic acid (Depakote)***

- LARGE ISSUE BEING NEED TO WATCH LABS FOR TOXICITY
Antipsychotics as mood stabilizers??

- Fairly good evidence...not better evidence
- This was one of the greatest marketing moves in pharmaceutical history
- Atypical antipsychotics became the 2nd most prescribed class on the Medicaid formulary
- Quicker onset of therapeutic action
- Sold as “less blood draws”
  - However, the onset of lipid and sugar problems states otherwise
Typical Antipsychotics

**Drugs**

- chlorpromazine (Thorazine) [prototype 1st gener.]
- thioridazine (Mellaril)
- molindone (Moban)
- trifluoperazine (Stelazine)
- thiothixene (Navane)
- pimozide (Orap)
- fluphenazine (Prolixin)***
- haloperidol (Haldol)***
- Loxapine (Loxitane)

***Most issues here with movement side effects***
Psychopharmacology Problem!!

- Typical antipsychotics block dopamine
  - This decreases psychotic symptoms
  - HOWEVER, it also causes the aforementioned side effects!!

- Consequently, something had to be developed to deal with psychosis without requiring such monitoring..........................
Atypical Antipsychotics

- **Drugs**
  - risperidone (Risperdal) [most “typical”]
  - quetiapine (Seroquel)
  - olanzapine (Zyprexa)
  - clozapine (Clozaril)
  - ziprasidone (Geodon)
  - aripripazole (Abilify)
  - Paliperidone (Invega).....developed off of Risperdal
  - Iloperidone (Fanapt)
  - Asenapine (Saphris).....sublingual.....Europe for while
  - Lurasidone (Latuda)
Side Effects and Toxicities of Atypical Antipsychotics

**All have sedation and weight gain (proposed insulin resistance?)**

- **Clozaril** = *Agranulocytosis* (weekly CBCs) and seizures
- **Risperdal** = biggest risk of "typical" side effects
- **Zyprexa** = one of the worst for *weight gain*
- **Seroquel** = also bad for weight gain, *cataracts*, and hepatotoxic
- **Other six new ones……nothing yet!**
Are newer meds better?

- In a word.............NO

- Side effects take years in “real patients” to develop and become part of the literature

- Strong fiscal incentive to have newer meds “work better”
  - Extend patents
  - New formulations

- Recent studies have shown that the atypicals do:
  - Cause less motion problems and tardive dyskinesia

- Recent studies have also shown that the atypicals do not:
  - Work better for negative symptoms
  - Cause less diabetes, lipid problems
  - Show better safety in long term care than the typicals
“Special” Section

- Long acting injectable medications:
  - Great data on compliance
  - Often preferred for convenience and lessened side effect burden

- Haldol-D
- Prolixin-D
- Risperdal Consta
- Invega Sustenna
- Zyprexa Relprevv
- Abilify Maintenna
Atypical Antipsychotics and “off label usage”

- Often used in much smaller dosages than needed for bipolar/schizophrenia
  - Sleep
  - Impulsivity
- Becoming more of a market on the street for diversion
- Often used in conjunction with illicit drugs/alcohol
Antianxiety Medications

- 4 Main Classes
  - Benzodiazepines (short term use best)
  - Barbituates (rarely used for this purpose)
  - SSRIs / SNRIs (best long term data)
  - Other

- SSRIs are now becoming the 1st line drug for many of these disorders!!
Benzodiazepines (BZDs)

- **Mechanism** = increase GABA
- **Drugs**
  - chlordiazepoxide (Librium)**
  - clonazepam (Klonopin)**
  - diazepam (Valium)**
  - lorazepam (Ativan)**
  - temazepam (Restoril)
  - alprazolam (Xanax)**
  - triazolam (Halcion)
  - midazolam (Versed)
  - Oxazepam (Serax)

  [EtOH w/d]

  [anesthetic]
BZD Toxicity and Side Effects

- All of them are relatively poor at long term anxiolysis d/t: rebound anxiety!
- This as well as short half lives lead to: increased dependence!

- **BZD Overdose** = weakness, ataxia, drowsiness, and Possible Aspiration / Respiratory Arrest!
- Often abused with other drugs / alcohol
Barbituates

- Very rarely used d/t high incidence of overdose and *respiratory arrest!!!!*
  - Much higher occurrence of problems than with BZDs

- Drugs
  - phenobarbital (Luminal)
  - pentobarbital (Nembutal)
  - secobarbital (Seconal)
Other Anxiolytics / Hypnotics

- Varying mechanisms, toxicity **is very rare** in these classes if taken properly...
- Drugs
  - buspirone (Buspar) [tx: GAD]
  - chloral hydrate (Somnote)
  - diphenhydramine (Benadryl) [antihistamine]
  - hydroxyzine (Vistaril, Atarax) [antihistamine]
  - zaleplon (Sonata)
  - zolpidem (Ambien)*** .....now Intermezzo
  - Ezopiclone (Lunesta)
  - Ramelteon (Rozerem) ..... melatonin based
  - propanolol (Inderal)
Sleeping Medicines

- As you can see, there are a variety of differing classes / types
- However, for any chronic sleep condition, the data show very poor response to “only using meds”
- Sleep Hygiene
- CBT
- Dietary changes……..minimize AODA
- Circadian regulation
ADHD treatments

- **Stimulants**
  - Methylphenidate (Ritalin, Concerta, Daytrana)
  - Dexmethylphenidate (Focalin)
  - Amphetamine salts (Adderall, dexedrine, Vyvanse, etc...)

- **Pseudostimulants**
  - Modafanil (Provigil)  Pemoline (Cylert)
  - Armodafinil (Nuvigil)

- **Non-stimulants**
  - Atomoxetine (Strattera)
  - Clonidine (Catapres, Kapvay)
  - Guanfacine (Tenex, Intuniv)
  - Bupropion (Wellbutrin)
AODA treatments

- Naltrexone (ReVia, Vivitrol)........... opioids / alcohol
- Methadone (Dolophine)............. specialized clinics
- Buprenorphine/Naloxone (Suboxone)
- Acamprosate (Campral)
- Disulfiram (Antabuse)
- Varenicline (Chantix)
- Buproprion (Zyban)
Diagnoses and meds

- **Best**
  - Schizophrenia
  - Bipolar Disorder, manic or depressed
  - Major Depressive Disorder (but not always)
  - Panic Disorder
  - OCD
  - ADHD

- **Not as helpful**
  - Other anxiety disorders (GAD, SAD, PTSD)
  - Personality disorders
  - Adjustment Disorders
  - AODA
  - Somatization
  - Autism spectrum
  - Dementias
Psychiatric Meds - Summary

- 1) Psychotropic meds can be used as a primary treatment or as a symptomatic relief for many mental illnesses

- 2) Be wary of the misusage, overdiagnosis, and influence of the pharmaceutical industry that can lead to negative outcomes (and negative publicity)
3) When working with clients, make sure that they know what they are taking and why. If not, that is a good intro topic for their provider.

4) Encourage all patients to stay consistently with their outpatient psychiatrist.....and to discuss all positive and negative outcomes........
Psych Meds and Law enforcement

1) If having knowledge, it can help on the ED
2) Be aware that patients have the right to refuse medication in MOST cases
3) These meds do have side effects and they should be active with outpatient providers to discuss/change these
Psych meds summary (cont.)

4) Bringing in bottles with patients can be very helpful

5) Realize that psych meds can be abused or can be abused in those with history of addiction

6) Any concerns over overdose require an ER visit........regardless of “how many” were taken
Psych Meds and Chapter 51

- 1) Being on psych meds is not indicative of a chapter 51 (or an illness for that matter)
- 2) Being on psych meds (or off of them) is not indicative of an inability to make decisions
- 3) Being off of psych meds is an important clinical topic, but not indicative of a Chapter 51
Conclusions

- Whenever evaluating a patient’s symptoms, be **AWARE OF THEIR MEDS**!
- Do not forget that other “medical” meds can interfere, as can natural supplements
- Just because a patient does not have a “psychiatric diagnosis”, does not mean that they’re not on **psychotropics**
- Psychotropic medication can be not only **HELPFUL** but also **HARMFUL**!
  - Respect them by using them properly and at the lowest effective dosages (under the guidance of a psychiatrist)
“Real knowledge is to know the extent of one’s ignorance.”

-Confucius