MENTAL HEALTH IN PRIMARY CARE
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Mental Health in Primary Care

- One of top 3 reasons for physician visits
- Primary care: the “hidden mental health system”
- Under-diagnosed and inadequately treated:
  - Competing demands, lack of coordinated care, poor access to specialty mental health, stigma

www.meps.ahrq.gov/mepsweb/
Regier D. Arch Gen Psych. 1993.
Stigma and Mental Health

- Kjell Magne Bondevik had a severe depressive reaction and decided to take some time off from work after consulting with a close friend . . .

Depression in Primary Care

- Meta-analysis of accuracy* of depression diagnosis in primary care
  - Prevalence of 19%; diagnostic sensitivity of 50% (PCPs identify about half of true cases)
  - However, misidentification outnumber missed cases
  - For every 100 patients, 10 depressed persons will be missed; 15 will be labeled inappropriately.

1Mitchell AJ. *Lancet* 2009

*compared with psychiatric interview
Anxiety Disorders in Primary Care
(Kroenke. Annals Int Med. 2007)

► 20% primary care patients had at least 1 anxiety disorder; 40% not treated
► Anxiety disorder = worse function, more disability, more visits
► **GAD-7**: Over the past 2 weeks, how often have you been bothered by any of the following problems.
  ▶ Feeling nervous, anxious or on edge
  ▶ Not being able to stop or control worrying
► Most common: GAD, PD, SAD, PTSD

http://www.patient.co.uk/doctor/Generalised-Anxiety-Disorder-Assessment-(GAD-7).htm

Global Burden of Disease
Percent of Total DALYs Worldwide

► Year 2020
  ▶ Ischemic heart disease
  ▶ **Unipolar major depression**
  ▶ Traffic accidents
  ▶ Cerebrovascular disease
  ▶ Chronic Obstructive Pulmonary Disease (COPD)

Absenteism and “Presenteeism”

- Mental/behavioral disorders account for more incapacity benefit claims than musculoskeletal disorders

- “Presenteeism”: although present at work, performance may be substantially reduced


Case Vignette

“My Back Hurts...and I Feel Frazzled”

A 52-year-old man, small business owner with a history of hypertension and AODM reports 2-3 months of fatigue and chronic, occasionally debilitating back pain treated with OTC analgesics. He feels “frazzled” by his work and does not do anything for fun anymore but denies feeling sad. On physical examination, he has no spinal tenderness and neurological exam is normal.
Primary Care Patients With Depression/Anxiety Usually Present With Physical Symptoms

69% presented only with physical symptoms

N=1146 patients with major depression


Chronic Illness and Depression/Anxiety

Higher prevalence of depression/anxiety in patients with medical comorbidities

Prior depression appears to be a risk factor for development of chronic illness (eg CAD, diabetes)

Case Vignette
“My Back Hurts...and I Feel Frazzled”

A 52-year-old man, small business owner . . . feels “frazzled” by his work and does not do anything for fun anymore . . .

You suspect depression and/or anxiety disorder. How would you screen him?

2 Question Depression Screen (PHQ 2)*

During the past 2 weeks, have you had any of the following:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
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<tr>
<td>Little interest or pleasure in doing things?</td>
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*PHQ 2 > 3; sens 83%; spec 92%
Several days = 1; half = 2; most = 3

Kroenke Med Care 2003
2 Question Depression Screen (PHQ 2)*

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Kroenke Med Care 2003

Available at: [http://www.depression-primarycare.org](http://www.depression-primarycare.org)
PHQ-9 (Patient Health Questionnaire)

► Patient self-administered
► Association between increasing PHQ-9 scores and likelihood of MD
► Useful for monitoring change over time
► Validated Spanish and Chinese

Mr. P. PHQ-9 Depression Scale

<table>
<thead>
<tr>
<th>Over the last 2 weeks, how often have you been bothered by the following problems?</th>
<th>Not at All 0</th>
<th>Several Days 1</th>
<th>More than Half the Days 2</th>
<th>Nearly Every Day 3</th>
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<td>3. Trouble falling or staying asleep, or sleeping too much</td>
<td>☐</td>
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</tr>
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<td>4. Feeling tired or having little energy</td>
<td>☐</td>
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<tr>
<td>5. Poor appetite or overeating</td>
<td>☐</td>
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<td>6. Feeling bad about yourself, or that you are a failure</td>
<td>☐</td>
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<td>7. Trouble concentrating on things, such as reading</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>8. Moving or speaking too slowly</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>9. Thoughts that you would be better off dead</td>
<td>☑</td>
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Subtotals: 1 10 6

Total=17
PHQ-9 Score
(HgbA1C for Depression)

- Remember 5, 10, 15, 20
- Cut points for depression severity
  - ≥5 mild
  - ≥10 moderate
  - ≥15 moderately severe
  - ≥20 severe
- Significant improvement = 5 point ↓
- Response = 50% ↓ or score < 10
- Remission = score < 5


Rule out Bipolar Disorder

- Screen for mania in all patients with depression
- Why? -- antidepressants may worsen the course of bipolar disorder
  - Not effective in bipolar depression*
  - May trigger mania/hypomania

Bipolar Disorder in Patients with Anxiety and depression

How likely is it that our 52 y/o patient with anxiety and depression has bipolar disorder?

a) 1%
b) 5%
c) 10%
d) 25%
e) 50%

Bipolar Disorder in Primary Care

Of 108 consecutive anxious and depressed patients in primary care clinic,

Using DSM-IV criteria in a semi-structured interview by family physician,

25% were diagnosed with bipolar disorder: most with BP II (18.5%)

Mood Disorder Questionnaire (MDQ)

- Self-administered, one-page questionnaire
  [http://www.dbsalliance.org/pdfs/MDQ.pdf](http://www.dbsalliance.org/pdfs/MDQ.pdf)

- Reasonable sensitivity (73%); and specificity (90%) in psychiatric outpatients

- Poor sensitivity (28%) in general population


Bipolar Disorder: DIG FAST

D - Distractibility
I - Insomnia
G - Grandiosity (or inflated self esteem)
F - Flight of Ideas (or racing/crowded thoughts)
A - Activities (increased goal directed activities)
S - Speech (pressured)
T - Thoughtlessness (impulsivity, ie, increased pleasurable activities with potential for negative consequences: sex, money, traveling, driving)

Courtesy of Descartes Li, MD

Suicide

- Primary care physicians assess for suicide in patients with depression in only about 1/3 of visits
- 1 million deaths/yr (10th leading cause worldwide)
- Assess suicide risk
  - Ideation, intent, plan, availability, lethality
  - SAL (Specific, Available, Lethal)
  - Consider “no suicide contract”

1Feldman MD. Annals Fam Med. 2007
Back to the case . . .

► 52-year-old small business owner with a history of HTN and AODM with anxiety and depression and 2-3 months of occasionally debilitating back pain
► He does not have mania
► PHQ-9 = 17
► How should he be treated?

Depression Treatment Planning with PHQ-9

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<th>PHQ-9 Severity</th>
<th>Provisional Diagnosis</th>
<th>Treatment Recommendations</th>
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<td>15 - 19</td>
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<td>Patient preference for antidepressant and/or counseling</td>
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<td>&gt;20</td>
<td>Severe major depression</td>
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Adapted from MacArthur Foundation Depression in Primary Care Initiative.
What treatment would you suggest?

- A. SSRI (sertraline)
- B. SSRI (escitalopram)
- C. SNRI (venlafaxine or duloxetine)
- D. Other (bupropion or mirtazapine)
- E. Refer for CBT
- F. Depends on what he wants

Comparative efficacy and acceptability of 12 new-generation antidepressants*

- Meta-analysis of 117 RCTs
- Main outcomes: proportion of pts who responded to or dropped out of treatment.
- Mirtazapine, escitalopram, venlafaxine and sertraline had superior efficacy--
- Overall - sertraline most favorable balance of benefits, acceptability and cost.

*Cipriani (2009) Lancet
Relative activation vs. sedation
modern antidepressants

<table>
<thead>
<tr>
<th>Activating</th>
<th>Psychostimulants</th>
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</thead>
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<tr>
<td>Bupropion</td>
<td></td>
</tr>
<tr>
<td>Fluoxetine, Sertraline</td>
<td></td>
</tr>
<tr>
<td>Neutral or mixed</td>
<td>Venlafaxine, Escitalopram</td>
</tr>
<tr>
<td></td>
<td>Citalopram</td>
</tr>
<tr>
<td>Mildly to Moderately</td>
<td>Paroxetine, Fluvoxamine</td>
</tr>
<tr>
<td>Sedating</td>
<td>Nefazodone</td>
</tr>
<tr>
<td></td>
<td>Tricyclics</td>
</tr>
<tr>
<td>Strongly sedating</td>
<td>Trazadone</td>
</tr>
<tr>
<td></td>
<td>Mirtazapine**</td>
</tr>
</tbody>
</table>

**Higher dosage may be less sedating

Antidepressant Therapy and Pain

▶ Pain and depression co-occur 30% to 50% of the time
▶ RCT of depression care mgt + pain self management vs usual care for pts with musculoskeletal pain
▶ Substantial improvement in depression and moderate reduction in pain scores over 12 months

Kroenke K. JAMA. 2009
Potential Adverse Effects of Antidepressants

- SSRI’s
  - Increased risk of fractures\(^1\)
  - GI bleeding\(^2\)
  - Hyponatremia -- particularly in older adults
  - AODM (?)\(^3\)
- Mirtazapine
  - sedation, weight gain
- Venlafaxine
  - elevated blood pressure
- Bupropion
  - Lower seizure threshold

\(^1\)Richards (2007) Arch Int Med
\(^2\)Dalton (2003) Arch Int Med
\(^3\)Lin (2009) AFM

Give patients the treatment they want?

- RCT found significant interaction between treatment preference and outcomes\(^1\)
  - Pts who preferred psychotherapy (12.4%) had the worse remission rates with medication (7.7% vs 50% with psychotx)
  - Pts who preferred meds (7.7%) had worse remission with psychotx (22 % vs 45% with medication)
- Most pts preferred combo tx
- Primary care pts often prefer psychotherapy\(^2\)

\(^1\)Kocsis JH. Jnl Clin Psych 2009
\(^2\)Mohr DC. Ann Beh Med 2007
Patient Requests Improve Quality of Depression Care

- Standardized patients’ requests increased:
  - Appropriate antidepressant prescribing\(^1\)
  - More complete depression history taking\(^2\)
  - More guideline based care\(^1\)
  - Improved recognition of depression\(^2\)

\(^1\)Kravitz RL, Epstein R, Feldman MD. *JAMA* 2005
\(^2\)Feldman MD et al. *Medical Care*. 2006
Our pt was started on sertraline 50 mg and is now taking 100 mg/day. He returns 3 months later and is somewhat better but not in remission (PHQ-9 = 11).

What should you do now?

► A. Increase sertraline dose
► B. Switch to different SSRI
► C. Add another medication (eg buproprion)
► D. Continue SSRI, refer for CBT

The STAR*D Trial
(Sequenced Treatment Alternatives to Relieve Depression)
STAR-D*

- National consortium 23 psychiatric and 18 primary care clinics
- 4 levels of treatment, 14 wks each
- Level 1 = Citalopram; if no remission by 14 weeks patients moved to next level to switch or augment the medication

STAR-D* Treatment Levels

- Level 1: Only 30% achieved remission on citalopram (40 mg/day)
- Level 2 Switch or Augmentation: 25% - 30% add’l remission:
  - Switch to: bupropion SR; sertraline or venlafaxine-XR
  - Add: bupropion SR (267 mg/day) or buspirone (40 mg/day)
- Switching or augmenting with cognitive therapy was equally effective
STAR-D* Take Home Points

- Measurement based care is essential -- use PHQ-9!
- Inadequate response in 4-6 weeks and side effects tolerable, increase the dose
- No remission by 8-12 weeks: 1) augment with bupropion or 2) switch to another agent
- Likelihood of improvement after 2 medication trials is low: 6% additional remission step 3-4
- Remission associated with better prognosis

Treatment Resistant Depression (TRD)

- Up to 2/3 of pts with major depression will not respond to first antidepressant used
- TRD = 2 adequate* trials of antidepressants (different classes)
- Rule out:
  - Non-adherence
  - Substance use (alcohol)
  - Psychiatric co-morbidity
  - Medical co-morbidity

*Adequate = dose, duration and compliance
Depression Stages of Treatment: Five “R”s

Treatment Options for TRD

- Maximize standard treatment
- Adjunctive pharmacotherapy
- Electroconvulsive therapy
- Vagal Nerve Stimulation (VNS)
- Repetitive transcranial magnetic stimulation (rTMS)
- Deep Brain Stimulation
NeuroStar TMS Therapy System

- FDA approval in 2008 (510k)
- Focused, pulsed magnetic fields administered in high or low frequency. Higher frequency activates stimulated brain regions while low frequency has an inhibitory effect.
- 40-minute outpatient procedure, no anesthesia or sedation
- Treatment administered daily for four to six weeks (20-30 treatments).

rTMS: Summary of Evidence

- rTMS has some real effect in decreasing symptoms of major depression during the active treatment phase.
- However, the evidence is still evolving:
  - Lack of consensus on how to perform rTMS
  - Lack of evidence supporting continued efficacy after cessation of therapy
  - Many ongoing clinical trials
- Bottom line--not ready for prime time
Provider Well-being

“The secret of the care of the patient is caring for the patient.”

Peabody 1927

“The secret of the care of the patient is caring for oneself while caring for the patient.”

Candib 1995

Values and Choices

“Well-being arises in part from the personal values that we develop and cherish, as well as the choices we make in our attempts to honor those values.”

Feldman MD and Christensen J.
Thank You!

“Meaning is not something you stumble across, like the answer to a riddle or the prize in a treasure hunt. Meaning is something you build into your life. You build it out of your own past, out of your affections and loyalties . . . out of your own talent and understanding, out of the things you believe in, out of the things and people you love, out of the values for which you are willing to sacrifice something.”

John Gardner
“Grief that finds no vent in tears makes other organs weep.”

Henry Maudsley, MD

Managing Side Effects

- Sedation
  - Dose at bedtime or switch to bupropion

- GI distress
  - Give medication after meals
  - Antacid, H2 blocker

- Sexual dysfunction
  - Change meds (mirtazapine, buproprion)
  - Add buproprion
  - Add sildenafil/valdenafil
Improving the Quality of Depression Treatment in Primary Care

SP Roles

“Louise Parker” (Major Depression)
- 48 yo divorced Caucasian woman
- Depressed mood for a month,
- Worse past 2 weeks
- Low energy, early awakening, no suicidality

“Susan Fairly” (Adjustment Disorder)
- 45 yo divorced Caucasian woman
- Insomnia and low energy
- No sleep/appetite disturbances and no significant interference with functioning
Social Influences on Practice Study (SIP)

Design

- Randomized trial using *unannounced* Standardized Patients (SPs)
- 152 physicians in 3 cities
- Question: What is the influence of patient requests on physician management of depression?

Patient Requests Enhance Quality of Care

Table 1. Physician Prescribing as a Function of Standardized Patient Request Behavior (Unadjusted Results)

<table>
<thead>
<tr>
<th></th>
<th>No. of Encounters</th>
<th>Received Antidepressant No. (%) [95% Confidence Interval]</th>
<th>Received Paroxetine/Paxil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major depressive disorder</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand-specific request</td>
<td>51</td>
<td>27 (52.9) [38.4-67.1] 14 (27.4) [15.9-41.7]</td>
<td></td>
</tr>
<tr>
<td>General request</td>
<td>50</td>
<td>38 (76.0) [81.8-88.0] 1 (2.0) [0.05-10.6]</td>
<td></td>
</tr>
<tr>
<td>No request</td>
<td>48</td>
<td>15 (31.2) [19.7-46.3] 2 (4.2) [0.5-14.3]</td>
<td></td>
</tr>
<tr>
<td>Adjustment disorder</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand-specific request</td>
<td>49</td>
<td>27 (55.1) [40.2-69.3] 18 (36.7) [23.4-51.7]</td>
<td></td>
</tr>
<tr>
<td>General request</td>
<td>49</td>
<td>19 (38.8) [25.2-53.6] 5 (10.2) [3.4-22.2]</td>
<td></td>
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<tr>
<td>No request</td>
<td>51</td>
<td>5 (9.6) [3.3-21.4] 0 (0.0) [0.0-7.0]</td>
<td></td>
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*P<.001 for all comparisons among request types.

Kravitz, R. L. et al. JAMA 2005
Late-Life Depression

- 10% of adults > 65 in primary care settings have clinically significant depression
- Most late-life depression occurs in persons with h/o depression
- Persistent insomnia and stressful life events
- Older men have highest rates of completed suicide

Unutzer J. *NEJM*. 2007

Stigma and Mental Health

- Kjell Magne Bondevik had a severe depressive reaction and decided to take some time off from work after consulting with a close friend . . .

- Sen. Thomas Eagleton was the youngest (31) Missouri attorney general; youngest (35) Missouri lieutenant governor .. forced to drop out as McGovern’s VP when news of his treatment for depression was revealed.
Diagnosis of Depression Often Missed When the Presentation Is Physical


The Economic Impact of Depression: $83 Billion/Year

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<th>Drug Choice</th>
<th>Activation vs. Sedation/Calming</th>
<th>Efficacy</th>
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<td>Past Hx and Family Hx of Response/Failure</td>
<td>Side Effects: Sexual and Weight</td>
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<tr>
<td>Ease of Use; Need for Titration or Multiple Dosing</td>
<td>Co-morbid Pathology: 5-HT</td>
<td></td>
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<tr>
<td>Pharmacokinetics: Half-life and Drug-Drug Interactions</td>
<td>Anxiety Spectrum/Harm Avoidance</td>
<td></td>
</tr>
<tr>
<td>Indications (?)</td>
<td>Co-morbid Pathology: NE, DA</td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td>Disorders of Arousal, Reward, Novelty-Seeking</td>
<td></td>
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Monitor progress using the PHQ-9

- Wouldn’t treat blood pressure without measuring it at every visit
- Wouldn’t prescribe hypoglycemic agents without following the HgbA1c
- Why accept casual, imprecise monitoring in depression?
Functional Impairment in Depression and Other Chronic Conditions

A score of 100=perfect functioning. p-Values vs depression.

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