"Is my patient depressed?" - An Practical Update on Major Depression Diagnosis and Treatment (and why its important for Rheumatologists)

2016 Canadian Rheumatology Association Scientific Meeting
Lake Louise, Alberta

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As presented at the CRA ASM 2016 Lake Louise, Alberta
Mental illness in Canada

1 in 5
The number of people in Canada who will experience a mental illness

4000
The number of people who will commit suicide in Canada this year

500,000
The number of people who do not show up to work everyday because of mental illness

$51 billion
The approximate cost of mental illness in Canada each year

As presented at the CRA ASM 2016 Lake Louise, Alberta
Global Burden of Disease Study

Top 10 Conditions in High-Income Countries

- Ischemic heart disease: 8.3%
- Cerebrovascular disease: 6.0%
- Unipolar depressive disorders: 5.6%
- Alzheimer's & other dementias: 5.0%
- Respiratory cancers: 3.6%
- Adult-onset hearing loss: 3.6%
- COPD: 3.5%
- Diabetes mellitus: 2.8%
- Alcohol use disorders: 2.8%
- Osteoarthritis: 2.5%

COPD: chronic obstructive pulmonary disease; DALY: disability-adjusted life-year

As presented at the CRA ASM 2016 Lake Louise, Alberta

• One in five people in Canada are living with a mental illness in any given year.

6.7 million people in Canada with mental illness.

2.2 million people in Canada with type 2 diabetes.

1.4 million people in Canada with heart disease.

As presented at the CRA ASM 2016 Lake Louise, Alberta

Mental Health Commission of Canada, 2013
Most frequent conditions leading to short-term and long-term disability in Canada

Note: Respondents were asked to select the top three conditions.


As presented at the CRA ASM 2016 Lake Louise, Alberta
Let’s Start with the many faces of major depression

DSM-5 criteria

35-year-old female with Fibromyalgia
+ Depressed mood
+ Hypersomnia
+ Increased appetite / weight
+ Psychomotor retardation
+ Difficulty making decisions
+ Suicidal ideation

70-year-old male with Rheumatoid Arthritis
- Marked loss of interest / pleasure
- Insomnia
- Decreased appetite / weight
- Psychomotor agitation
- Impaired concentration
- Inappropriate guilt

As presented at the CRA ASM 2016 Lake Louise, Alberta
DSM-5 defines MDD as a period of $\geq 2$ weeks in which a person has 5 or more symptoms. Symptoms MUST include:

- Depressed mood and/or
- Loss of interest or pleasure

Must also experience $\geq 4$ of the following:

- Significant changes in weight and/or appetite
- Insomnia or hypersomnia
- Psychomotor agitation or retardation
- Fatigue or loss of energy
- Feelings of worthlessness or excessive/inappropriate guilt
- Diminished ability to think or concentrate, or indecisiveness
- Recurring thoughts of death or suicide, including plans and attempts

The symptoms cause clinically significant distress or impairment in social, occupational or other important areas of functioning.

Depression: A Multidimensional Disorder

**Emotional Symptoms**
- Feelings of guilt
- Suicidal
- Lack of interest
- Sadness

**Physical Symptoms**
- Lack of energy
- Decreased concentration
- Change in appetite
- Change in sleep
- Change in psychomotor skills

**Associated Symptoms**
- Brooding
- Obsessive rumination
- Irritability
- Excessive worry over physical health
- Pain
- Tearfulness
- Anxiety or phobias

Strong Correlation Between Number of Physical Symptoms and Prevalence of Psychiatric Disorders

The more physical complaints there are, the more likely there is a psychiatric problem.


As presented at the CRA ASM 2016 Lake Louise, Alberta
Limited Response
The Stress Diathesis Model

Hypothalamus → CRH → Pituitary → ACTH → Adrenal Cortex

Limbic System
- Mood dysregulation
- Memory impairment
- Hippocampal shrinkage
- Apoptosis/neuron death
- Cortisol + Adrenaline

Source: http://www.brainhq.com/brain-resources/image-gallery/brain-anatomy-images
Photo: colourbox.com

As presented at the CRA ASM 2016 Lake Louise, Alberta
Amygdala Volume and Corticosteroid Therapy

* Amygdala is a part of the limbic system involved in stress response

* 15 patients on long term prednisone therapy compared to 13 control subjects

* Corticosteroid treated patients had significantly smaller amygdala volumes

* Volume also correlated with duration of corticosteroid therapy

Depression: Association With Brain Changes

- Hippocampal atrophy
- Frontal cortex atrophy
- Glial cell loss prefrontal cortex
- Amygdala hyperactivity

Cognitive impairment and maintenance of depressed mood in MDD may be related to atrophy and altered function of these brain structures


As presented at the CRA ASM 2016 Lake Louise, Alberta
Antidepressants increase neurogenesis

**Normal**

**Chronic Stress**

- **↑ Glucocorticoids**
- **↓ BDNF**

**Atrophy/Death of Neurons**

**Antidepressants**

- **↑ Serotonin and NE**
- **↑ BDNF**
- **↓ Glucocorticoids**

**Normal Survival and Growth**

**Other Neuronal Insults:**
- Hypoxia-Ischemia
- Hypoglycemia
- Neurotoxins and Viruses


As presented at the CRA ASM 2016 Lake Louise, Alberta
Shared Pathophysiological Pathways Between Mood and Somatic Disorders

- Mood D/Os
- Inflammation
  - Pain
  - Substance misuse
    - Coronary artery D/O
    - Obesity, Insulin & Lipid abnormalities
      - Osteoporosis
      - Neurodegeneration
    - Neuropsychological impairment

As presented at the CRA ASM 2016 Lake Louise, Alberta

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Emotional and *somatic complaints*: a Shared Neurochemical Link in Depression?

Reducing oversensitization to somatic complaints

- Dysregulation of serotonin (5-HT) and norepinephrine (NE) in the brain are strongly associated with depression\(^1,3\)

- Because of the same imbalance of 5-HT and NE in the spinal cord, the brain may perceive an amplified pain signal\(^3\)

Imbalances of both 5-HT and NE may explain the presence of the emotional and physical symptoms of depression\(^3\)

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As presented at the CRA ASM 2016 Lake Louise, Alberta
Depression, Medical Disorders and Pain

- Painful physical symptoms of depression are common

- Depressed patients are 4X more likely to have a chronic painful condition than non-depressed patients

- Medical disorders (including pain conditions) and depression likely promote the onset of each other (bidirectional relationship may be explained by shared underlying pathophysiologies)

- Co-occurrence of medical disorders and MDD associated with:
  - worsened severity of both conditions
  - longer time for response to treatment for both conditions
  - increased rate of suicide
  - Residual painful symptoms prevent the remission of depression


As presented at the CRA ASM 2016 Lake Louise, Alberta
Diving into the Rheumatology Literature

• There is a wide range of research that discusses the Association between Rheumatologic disorders and Mood Disorders

• Studies cite the importance of considering the impact of Depression/Anxiety on the course of the patient’s Rheumatologic illness

• Here are a few studies that represent this premise:

As presented at the CRA ASM 2016 Lake Louise, Alberta
Mental disorders in Population with MSK Disorders

- Data from Canadian Community Health Survey (CCHS)
- Surveyed 37,000 respondents enquired re Major Depressive Disorder, Bipolar Disorder, Social Anxiety Agoraphobia and Panic Disorder and Substance Dependence
- Respondents were asked re presence of Arthritis or Rheumatism, Back Pain, Fibromyalgia and Any Chronic condition that had been diagnosed by health professional
- 8245 reported having arthritis or rheumatism
- Study found an elevated prevalence of mood, anxiety and substance use disorders in arthritis and rheumatism.
- Greater association found in the younger age groups and with the arthritis rheumatism group

Patten et al, BMC Musculoskeletal Disorders, 2006, 7:37

As presented at the CRA ASM 2016 Lake Louise, Alberta
Medical Outcomes Study - 22,000 patients in a 4 year Prospective Study

• Study on the outcomes of chronic illness
• First large scale study to include a psychiatric condition i.e. Major Depression along with other chronic medical conditions

3 Main findings:
1) Depression was associated with the same level or more of disability than 6 of the major medical conditions studied

2) Arthritis comorbid with Depression results in higher disability score than if each is simply added

3) Subthreshold depression had negative consequences which were longstanding


As presented at the CRA ASM 2016 Lake Louise, Alberta
Depression in Arthritis

- Meta-analysis of 72 studies including 13,189 patients with Rheumatoid Arthritis
- Study tried to account for different definitions of “Depression” and different screening tools used.
- Overall prevalence of Major Depression was 16.8%


* Large, epidemiological study conducted in the Netherlands
- Patients were sampled in their homes
- Having arthritis (of any type) significantly increased the odds of developing depression two years later, while prior depression had no effect on the development of arthritis.
- Incidence of any psychiatric disorder was significantly higher among persons <45 years of age.


As presented at the CRA ASM 2016 Lake Louise, Alberta
Fibromyalgia

• Estimated Prevalence of FM in USA  0.5%-4% with higher rates in women.
• Wide variability of of clinical presentation including fatigue, sleep disturbance, IBS, memory issues, mood alterations.
• FM has a severe impact on Quality of Life measures and is correlated with more severe disability in daily activities than other rheumatic conditions
• Study of 167 Italian women with Fibromyalgia  80.8% demonstrated lifetime and/or current comorbidity with mood and anxiety disorders. Pain severity was associated with current psychiatric illness. Patients with sleep disorders reported lower quality of life and higher pain severity.

Bennett RM, Smythe HA, Wolfe F. Recognizing fibromyalgia. PatientCare 1989;23:60-83n

As presented at the CRA ASM 2016 Lake Louise, Alberta
Improving Depression Care Benefits Functional Outcomes among Older Adults with Arthritis

- Randomized controlled trial with 1801 older adults (=>60) with arthritis
- Intervention was Antidepressant treatment +/- or 6-8 sessions of Psychotherapy (problem solving focus) versus usual care
- Outcome measures: Depression, pain intensity, interference with daily activities due to arthritis, general health, quality of life outcomes at 3, 6, and 12 months

- Arthritis patients who received enhanced depression care management in primary care showed improved arthritis related pain and functional outcomes, fewer depressive symptoms and better general health status and overall quality of life at 12 months

- Effect of Improving Depression Care on Pain and Functional Outcomes Among Older Adults With Arthritis
A Randomized Controlled Trial, Lin et al, JAMA. 2003;290(18):2428-2429.
• “Rheumatologists may be reluctant to address mood disturbance and other psychological issues of their patients due to time constraints, lack of resources, inadequate professional training, or the belief that other professionals should be dealing with such problems.”
• Nicassio, Arthritis Care Res. 2008;59:155-158
3 Steps for Caring for your Depressed Patient:

• A first step to optimal Tx may simply be an awareness of the role that depression can play in the course of arthritis (or any rheum disease) and its treatment.

• Secondly Screen for depression using one of the several brief instruments developed for use in primary care.

• Finally, Assist patients who have depression in finding appropriate care.

• Devellis, B and Devellis R, Depression and Arthritis, NC Med J November/December 2007, Volume 68, Number 6

As presented at the CRA ASM 2016 Lake Louise, Alberta
How Can We Screen and Monitor Patient Progress?

As presented at the CRA ASM 2016 Lake Louise, Alberta
Why don’t clinicians use scales to measure outcome when treating depressed patients?

How often do you use a rating scale to monitor the course of treatment for depression?


Why not? Please indicate all that apply.

<table>
<thead>
<tr>
<th>Reason</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not believe it would be clinically helpful.</td>
<td>28</td>
</tr>
<tr>
<td>Do not know what scale to use.</td>
<td>21</td>
</tr>
<tr>
<td>Takes too much time.</td>
<td>34</td>
</tr>
<tr>
<td>Too disruptive to practice.</td>
<td>19</td>
</tr>
<tr>
<td>Wasn’t trained to use them.</td>
<td>34</td>
</tr>
</tbody>
</table>

Does Measurement-based Care Help Guide Treatment?

Canadian Practice Reflective Audit Results

67% of Primary Care and 77% of psychiatrists made changes to treatment regimens

* Physicians may have changed more than one part of a patient’s treatment regimen, therefore, percentages do not equal 100%.

Rosenbluth M et al., The Canadian Journal of Diagnosis, June 2011

As presented at the CRA ASM 2016 Lake Louise, Alberta
Practical Screening Tool

When Time Is Limited...
The 30 second PHQ-2 depression screen:

<table>
<thead>
<tr>
<th>Over the past 2 weeks, how often have you been bothered by any of the following items?</th>
<th>Not at All</th>
<th>Several Days</th>
<th>More Than Half the Days</th>
<th>Nearly Every Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Little interest or pleasure in doing things</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Feeling down, depressed or hopeless</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Cut-off score of 3

- Sensitivity = 83%, specificity = 92% for MDD
PHQ-2: 2 Questions

• 1) “During the past two weeks, have you often been bothered by feeling down, depressed or hopeless?”

2) “During the past two weeks, have you often been bothered by having little interest or pleasure in doing things?”

• The two-question screen was found to be a valid and effective means of identifying subjects with major depression
• A “no” response to both questions made depression highly unlikely.
• The test results were similar across all ages.

Patient Health Questionnaire - PHQ 9

- Self-rated scale is the “HbA1c” of depression.
- Was designed specifically for primary care.
- Is highly sensitive and specific for the diagnosis of depression.
- Can be used to monitor treatment
### Patient Health Questionnaire (PHQ-9)

<table>
<thead>
<tr>
<th>NAME</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Over the last 2 weeks, how often have you been bothered by the following problems?  
*Read each item carefully; and check the appropriate box.*

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Several days</th>
<th>More than half the days</th>
<th>Nearly every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Little interest or pleasure in doing things</td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
<tr>
<td>b. Feeling down, depressed, or hopeless</td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
<tr>
<td>c. Trouble falling asleep, staying asleep, or sleeping too much</td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
<tr>
<td>d. Feeling tired or having little energy</td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
<tr>
<td>e. Poor appetite or overeating</td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
<tr>
<td>f. Feeling bad about yourself, feeling that you are a failure, or feeling that you have let yourself or your family down</td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
<tr>
<td>g. Trouble concentrating on things such as reading the newspaper or watching television</td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
<tr>
<td>h. Moving or speaking so slowly that other people could have noticed. Or being so fidgety or restless that you have been moving around a lot more than usual</td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
<tr>
<td>i. Thinking that you would be better off dead or that you want to hurt yourself in some way</td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
</tbody>
</table>

*Total for each column*

2. If you checked off any problem on this questionnaire so far, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

<table>
<thead>
<tr>
<th></th>
<th>Not difficult at all</th>
<th>Somewhat difficult</th>
<th>Very difficult</th>
<th>Extremely difficult</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
</tbody>
</table>

### Guide for Interpreting PHQ-9 Scores

<table>
<thead>
<tr>
<th>Scale</th>
<th>Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>None to minimal</td>
</tr>
<tr>
<td>5-14</td>
<td>Mild</td>
</tr>
<tr>
<td>15-19</td>
<td>Moderate</td>
</tr>
<tr>
<td>20-27</td>
<td>Severe</td>
</tr>
</tbody>
</table>

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*May be printed without permission*
### Treatment options based on the PHQ9 score

<table>
<thead>
<tr>
<th>Score</th>
<th>Severity</th>
<th>Proposed Treatment Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 4</td>
<td>None-minimal</td>
<td>None</td>
</tr>
<tr>
<td>5 – 9</td>
<td>Mild</td>
<td>Watchful waiting; repeat at follow-up</td>
</tr>
<tr>
<td>10 – 14</td>
<td>Moderate</td>
<td>Consider psychotherapy and/or pharmacotherapy</td>
</tr>
<tr>
<td>15 – 19</td>
<td>Moderately Severe</td>
<td>Consider pharmacotherapy and/or psychotherapy</td>
</tr>
<tr>
<td>20 – 27</td>
<td>Severe</td>
<td>Initiate pharmacotherapy and, if severe impairment, or actively suicidal consider consultation +/- admission to psychiatry</td>
</tr>
</tbody>
</table>

As presented at the CRA ASM 2016 Lake Louise, Alberta
Greater Association of Four Chronic Medical Disorders With Anxiety Disorders Than With Depression

• In the National Comorbidity Survey-Replication (NCS-R), Kessler et al. reported that various anxiety disorders had an equal or greater association than depression with the following four chronic medical disorders:

  - hypertension
  - arthritis
  - asthma
  - ulcers
<table>
<thead>
<tr>
<th>Over the last 2 weeks, how often have you been bothered by the following problem?</th>
<th>Not At All</th>
<th>Several Days</th>
<th>More Than Half The Days</th>
<th>Nearly Everyday</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Feeling nervous, anxious, on edge</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Not being able to stop or control worrying</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. Worrying too much about different things</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. Trouble relaxing</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. Being so restless that it is hard to sit still</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. Becoming easily annoyed or irritable</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. Feeling afraid as if something awful might happen</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How difficult have these problems made it for you to do your work take care of things at home or get along with other people?</td>
<td>Not Difficult</td>
<td>Somewhat Difficult</td>
<td>Very Difficult</td>
<td>Extremely Difficult</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As presented at the CRA ASM 2016 Lake Louise, Alberta

Spitzer RL. Arch *Intern Med* 2006;166:1092-1097.
## The Somatic Symptom Scale – PHQ-15

**PHYSICAL SYMPTOMS (PHQ-15)**

During the past 4 weeks, how much have you been bothered by any of the following problems?

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Not bothered at all (0)</th>
<th>Bothered a little (1)</th>
<th>Bothered a lot (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Stomach pain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Back pain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Pain in your arms, legs, or joints (knees, hips, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Menstrual cramps or other problems with your periods (WOMEN ONLY)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Headaches</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Chest pain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Dizziness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Fainting spells</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Feeling your heart pound or race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. Shortness of breath</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>k. Pain or problems during sexual intercourse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>l. Constipation, loose bowels, or diarrhea</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>m. Nausea, gas, or indigestion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n. Feeling tired or having low energy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o. Trouble sleeping</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(For office coding: Total Score $T$ = $+$ )

### TOTAL SCORE VS. SEVERITY OF SOMATIC SYMPTOMS

<table>
<thead>
<tr>
<th>Score</th>
<th>Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-9</td>
<td>Low</td>
</tr>
<tr>
<td>10-14</td>
<td>Moderate</td>
</tr>
<tr>
<td>15-20</td>
<td>High</td>
</tr>
</tbody>
</table>

- Brief, self-rated somatic symptom scale
- Useful for screening somatization as well as monitoring somatic symptom severity.
- Strong correlation between PHQ15 and functional status, disability days and symptom related difficulty.


As presented at the CRA ASM 2016 Lake Louise, Alberta
The SDS (Sheehan Disability Scale)

- 10-point self-rated scale
- Uses visuospatial, numeric and verbal descriptive anchors
Treatments for major depressive disorder

Counselling or psychotherapy

Self-management, Support groups

Medications and physical treatments

As presented at the CRA ASM 2016 Lake Louise, Alberta
Emerging Theories: How Antidepressants Work

- Increases in trophic factors: BDNF, VEGF, IGF-1
- Gliogenesis in Frontal Lobes
- Decrease glutamate to decrease excitotoxicity
- Decrease Pro-Inflammatory Cytokines
- Increase GC receptor sensitivity

Image copyright unknown       Maletic V, Raison C. Frontiers Bioscience 2009

As presented at the CRA ASM 2016 Lake Louise, Alberta
# Recommendations for First-Line Anti-Depressants

<table>
<thead>
<tr>
<th>Antidepressant (Brand Name)</th>
<th>Antidepressant (Brand Name)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bupropion [Wellbutrin®]</td>
<td>Mirtazapine [Remeron®]</td>
</tr>
<tr>
<td>Citalopram [Celexa®]</td>
<td>Moclobemide [Manerix®]</td>
</tr>
<tr>
<td>Desvenlafaxine [Pristiq®]</td>
<td>Paroxetine [Paxil®]</td>
</tr>
<tr>
<td>Duloxetine [Cymbalta®]</td>
<td>Sertraline [Zoloft®]</td>
</tr>
<tr>
<td>Escitalopram [Cipralex®]</td>
<td>Venlafaxine [Effexor®]</td>
</tr>
<tr>
<td>Fluoxetine [Prozac®]</td>
<td>Vortioxetine (Trintellix)</td>
</tr>
<tr>
<td>Fluvoxamine [Luvox®]</td>
<td></td>
</tr>
</tbody>
</table>


As presented at the CRA ASM 2016 Lake Louise, Alberta
(And so you’re up to date on the latest classification)
Evolution of antidepressant agents

**SSRIs**
- Citalopram, escitalopram, fluoxetine, fluvoxamine, paroxetine, sertraline
- Antidepressant activity (improves mood)

**SNRIs**
- Duloxetine,* desvenlafaxine, venlafaxine
- Antidepressant activity (improves mood) + potential improvement in painful physical symptoms

**Novel**
- Multimodal agents (vortioxetine, vilazodone**)
- Antidepressant activity (improves mood) + other potential actions to improve cognitive symptoms of depression

*Duloxetine carries an indication for treating painful physical symptoms outside of MDD (desvenlafaxine and venlafaxine do not).
**Vilazodone is not approved for MDD in Canada.
SNRI, serotonin and norepinephrine reuptake inhibitor.

As presented at the CRA ASM 2016 Lake Louise, Alberta
Treatments With Evidence of an Anti-Inflammatory Action

- Exercise and nutrition
- Antidepressants: SSRIs, SNRIs, NRIs, TCAs
- CBT, IPT, Mindfulness-based therapies
- Omega-3 fish oil
- Estrogen
- Meditation, Tai Chi, yoga
- Lithium
- Atypical antipsychotics
- Vagus nerve stimulation (cholinergic anti-inflammatory pathway)
- Pregabalin


As presented at the CRA ASM 2016 Lake Louise, Alberta
## CANMAT Recommendations for First-line Psychotherapy

<table>
<thead>
<tr>
<th>Type of Psychotherapy</th>
<th>Premise</th>
<th>Acquired Skills / Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive-behavioural therapy (CBT)</td>
<td>Distorted beliefs about the self, the world, and the future maintain depressive affect</td>
<td>Recognize → Respond → Adapt</td>
</tr>
<tr>
<td>[Level 1]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal therapy (IPT)</td>
<td>Current interpersonal relationships affect the immediate social context</td>
<td>Focus on at least 1 key area: role transitions, interpersonal disputes, grief, interpersonal deficits</td>
</tr>
<tr>
<td>[Level 1]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Behavioural interventions can be used as adjunct to pharmacotherapy to improve functional outcomes earlier*

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CANMAT Clinical Guidelines for the Management of Major Depressive Disorder in Adults, J Affective Disorders, 2009

As presented at the CRA ASM 2016 Lake Louise, Alberta
• 1. Screening for and monitoring of anxiety, depression and general psychological distress that impairs daily functioning beyond the limits imposed by the disease should be part of rheumatologic practice.

• 2. The preferred first-line psychological treatment for anxiety disorder is cognitive–behavioural therapy employing a variety of techniques including cognitive restructuring, exposure and behavioural experiments.
• 3. In case of **mild depression**, guided physical exercise and self-help guided by cognitive–behavioural therapy principles are indicated. Watchful waiting for 2 weeks to determine if there is improvement. Add on Sleep hygiene and anxiety management, if indicated.

• 4. In case of **moderate or severe depression**, more extensive psychological therapies by trained professionals are the mainstay approach to reduce relapse risk.
So, I think My patient with (insert rheumatologic disorder here) is depressed:

• I have asked the Questions for the PHQ 2:
  “During the past two weeks, have you often been bothered by feeling down, depressed or hopeless?”
  “During the past two weeks, have you often been bothered by having little interest or pleasure in doing things?”

• And she said ‘Yes” to both and started crying....
So, I think My patient with (insert rheumatologic disorder here) is depressed:

- After talking with her, getting more background and some support I gave her the **PHQ 9 scale** and her score is:
  - 8 (mild) Consider emotional and behavioral support in your clinic
    - Lifestyle adjustments
    - Watchful waiting and follow up with same questions at next visit
  - 19 (mod-severe) she is **not** suicidal
    Empathy, behavioral support, lifestyle adjustments
    Refer to Family Physician for possible pharmacologic TX
    Handy to **send copy of PHQ9** with patient for FP perhaps with quick note.

Any score with suicidal ideation, intent, plan, consider **as urgent**...
Functional recovery as a treatment goal in MDD

- Reducing risk
  - Suicide
  - Accidents
  - Relapse

- Symptom remission
  - Emotional control
  - Hope and confidence
  - Clarity of thinking
  - “Feeling well”

- Normal function
  - Participation in family/relationship
  - Work engagement
  - Quality of life
  - “Doing well”

Ultimate Goal

What are patients looking for?

Factors identified as very important, in rank order:

1. Presence of positive mental health (e.g. optimism, vigour, self-confidence)
2. Feeling like your usual, normal self
3. Return to usual level of functioning at work, home or school
4. Feeling in emotional control
5. Participating in, and enjoying, relationships with family and friends
6. Absence of symptoms of depression
Rheumatology: The Happiest Specialty (besides Psychiatry??) as per Dr. O’Dell (Director Internal Medicine Residency Program/Div. Chief Rheumatology  University of Nebraska )

10. We do not pay as many taxes as most other docs (Dr O’Dell says “OK, I was reaching a little here”).
9. We see and care for patients of all ages.
8. We take care of the whole patient, not just an organ.
7. We practice the art as well as the science of medicine.
6. We get lots of hugs from our patients—both literally and figuratively.
5. Rheumatology self-selects happy people.
4. We have excellent therapies and get to see excellent results.
3. We are diagnosticians—the Sherlock Holmes of the clinic—often the court of last resort.
2. We get to take care of, and form long-term relationships with our patients.
1. We are in control of our lives, practice, and time. Therefore, most of us know our children’s names.
Depression and Anxiety Resources for your Patients

- **www.cmha.ca**  Canadian Mental Health Association
- **Bounce Back** is a free program for adults experiencing mild to moderate depression, stress, or worry, using self-help materials and telephone coaching: [www.bouncebackbc.ca](http://www.bouncebackbc.ca)
- **Living Life to the Full** is a fun and engaging mental health promotion course that helps people learn skills to deal with the stresses of everyday life: [www.llttf.ca](http://www.llttf.ca)

[www.depressionhurts.ca](http://www.depressionhurts.ca)
[www.healthymindscanada.ca](http://www.healthymindscanada.ca)
[www.mooddisorderscanada.ca](http://www.mooddisorderscanada.ca)

Canadian Network for Mood and Anxiety Treatments: [www.canmat.org](http://www.canmat.org)

[www.anxietybc.com](http://www.anxietybc.com) (Anxiety Disorders Association of B.C)

OBAD – Organization for Bipolar Affective Disorder  [www.obad.ca](http://www.obad.ca)

As presented at the CRA ASM 2016 Lake Louise, Alberta
The Mood Gym:  [www.moodgym.anu.edu.au](http://www.moodgym.anu.edu.au) (Australian National University- free self help CBT)

- A free interactive internet-based program designed to prevent and decrease symptoms of depression and anxiety.

- Mood GYM aims to teach you how to feel less stressed, depressed and anxious and better able to cope with life.

- From Mood GYM you will learn:
  - How to think about problems and problem solving
  - Self-esteem improvement and assertiveness
  - How to increase the pleasure in life, relax and cope with stressors such as a relationship breakup

- Think of Mood GYM as an interactive self-help book

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