MANAGEMENT
Goals of Treatment
Goals in Pain Management

• Involve the patient in the decision-making process
• Agree on realistic treatment goals **before** starting a treatment plan

- Optimized pain relief
- Improved function

- Minimized adverse effects

Prognosis of Patients with Fibromyalgia

• Chronic condition, but improvement frequently seen in community practice, particularly when patients are diagnosed and treated early
  – Kennedy and Felson found 66% of 29 US patients followed in an academic rheumatology referral practice indicated some improvement over 10 years
  – After 2 years of treatment with a simple regimen, Australian patients with fibromyalgia:
    • 47% no longer fulfilled Smythe or ACR criteria for fibromyalgia
    • 24.2% of patients in remission

ACR = American College of Rheumatology; US = United States
Management of Fibromyalgia: Recommended Treatment Approach

- Multidisciplinary therapy individualized to patients’ symptoms and presentation is recommended
- A combination of non-pharmacological and pharmacological therapies may benefit most patients

### Non-pharmacological
- Aerobic exercise
- Cognitive behavioral therapy
- Patient education
- Strength training
- Acupuncture*
- Biofeedback*
- Balneotherapy*

### Pharmacological
- Non-narcotic analgesics
- Analgesic antiepileptics
- Antidepressants
  - TCAs
  - SSRIs
  - SNRIs
- Muscle relaxants
- Other

*Limited evidence for efficacy exists

Balneotherapy: treatment of disease or health conditions by bathing

SNRI = serotonin-norepinephrine reuptake inhibitor; SSRI = selective serotonin reuptake inhibitor; TCA = tricyclic antidepressant

Core Treatment of Fibromyalgia

1. Confirm diagnosis
2. Identify important symptom domains, their severity and level of patient function
3. Evaluate for comorbid medical and psychiatric disorders
4. Assess psychosocial stressors, level of fitness and barriers to treatment
5. May require referral to a specialist for full evaluation
6. Provide education about fibromyalgia
7. Review treatment options
   - Initiate therapy based on patient’s presentation and evidence-based guidelines

Overview of Fibromyalgia Management

Confirm fibromyalgia diagnosis

Educate the patient

Collaborate with patient to prioritize individual treatment goals

Develop treatment plan reflecting patient’s priorities and preferences

Pharmacotherapy

Non-pharmacological therapy

Treatment of comorbid conditions

Identify other health care providers who can work with you to care for patient

Identify community resources for self-management

At follow-up visits evaluate:
- Progress towards treatment goals
- Physical activity
- Use of self-management techniques
- Medication efficacy and adverse effects
- Comorbidities
- Adjustments to treatment plan

Maintain focus on progress over time vs. daily ups and downs

Multimodal Treatment of Fibromyalgia Based on Biopsychosocial Approach

- Multimodal treatment of pain
- Sleep hygiene
- Self-management support
- Physical therapy
- Manage expectations
- Treat comorbid conditions
- Pharmacotherapy
- Cognitive behavioral therapy
- Education

Fibromyalgia: Medication Is Just One Part of the Treatment Approach

**NOT shown to be effective or recommended:**
- Opioids
- Benzodiazepines
- NSAIDs
- Magnesium
- Vitamin B1
- Hormonal agents (thyroxine, DHEA, melatonin, calcitonin)

**Pharmacological treatment**
- 3 medications approved by the FDA:
  - Pregabalin
  - Duloxetine
  - Milnacipran

**Non-pharmacological treatment**
- Aerobic exercise
- Cognitive behavioral therapy
- Strength training
- Acupuncture
- Hypnotherapy
- Biofeedback
- Balneotherapy
- Massage therapy
- Behavioral therapies, such as relaxation
- Transcranial magnetic stimulation?

DHEA = dehydroepiandrosterone; FDA = Food and Drug Administration; NSAID = non-steroidal anti-inflammatory drug

Non-pharmacological Treatment
Non-pharmacological Treatment of Fibromyalgia

Seek support from other health care professionals – nurses, social workers, occupational therapists, physiotherapists, psychologists, psychiatrists, etc.

Strong evidence supports aerobic exercise and cognitive behavioral therapy.

Moderate evidence supports massage, muscle strength training, acupuncture and spa therapy (balneotherapy).

Limited evidence supports spinal manipulation, movement/body awareness, vitamins, herbs and dietary modification.

Non-pharmacologic Treatments with Demonstrated Efficacy Currently in Use

Cognitive Behavioral Therapy
- Positive effects on coping with and control over pain
  - Not proven to improve pain
- Proven to improve physical function
- Should be done by a trained professional

Aerobic and Strengthening Exercises
- Reduce pain, increase self-efficacy, improve quality of life and reduce depression
- Low-to-moderate intensity, 2–5 times/week

Patient Education
- Conflicting evidence but some studies have shown improvements in pain, sleep, fatigue and quality of life
Non-pharmacologic Interventions to Improve Sleep in Fibromyalgia

1. Avoid stimulants
2. Go to bed and rise at regular times
3. Avoid napping through day
4. Exercise regularly, particularly in the afternoon
5. Use the bed only for sleep and sex
6. Relax before bed
7. Printed information on sleep for patients

What is helpful for fatigue?

• Improvement of sleep hygiene
• Avoid napping through the day
• Moderate physical activity
• Pacing
• Realistic goal setting
• Healthy eating
• Avoid stimulants
• Cognitive behavioral therapy
• Some medications may improve fatigue

Physical Activity and Fibromyalgia

Benefits

- Stimulates release of endorphins and enkephalins within 30 minutes
- These bind to opioid receptors, reducing pain by an action on both ascending and descending neural pathways

Recommendations for Fibromyalgia

Type of Exercise

- Try to include different types in one session (e.g., aerobic, strengthening, stretching)
- Patient preference and availability should guide selection

Intensity

- Start low, go slow
- Gradually increase to reach moderate intensity level

Cognitive Behavioral Therapy in Fibromyalgia

Technique

Learn to identify emotions that influence cognitive and affective components of pain (anxiety, helplessness, depression)

Employ active cognitive, problem-solving and distraction/relaxation techniques to modify emotions

Develop active strategies targeting well-being and control

IASP: Non-pharmacological Treatment of Fibromyalgia

- Exercise
- Cognitive behavioral therapy
- Multimodal treatment programs
- Balneotherapy
- Homeopathy
- Mild infrared hyperthermia
- Acupuncture
Non-pharmacological Treatment of Fibromyalgia: APS Guidelines

1st line
- Cardiovascular exercise
- Cognitive behavioral therapy
- Patient education
- Multidisciplinary therapy

2nd line
- Strength training
- Acupuncture
- Hypnotherapy
- Biofeedback
- Balneotherapy

3rd line
- Chiropractic, manual and massage therapy
- Electrotherapy
- Ultrasound

APS = American Pain Society
Non-pharmacological Treatment of Fibromyalgia: Canadian Guidelines

- **Self-management strategies** with active patient participation and interventions that improve self-efficacy should be an integral component of the therapeutic plan for the management of fibromyalgia.
- Persons with fibromyalgia should participate in a **graduated exercise program** of their choosing.
- **Cognitive behavioral therapy** even for a short time is useful and can help reduce fear of pain and fear of activity.
- There is currently insufficient evidence to support the recommendation of complementary and alternative medicine treatments for the management of fibromyalgia.
Non-pharmacological Treatment of Fibromyalgia: Brazilian Consensus

<table>
<thead>
<tr>
<th>Recommended</th>
<th>Not Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Cognitive behavioral therapy</td>
<td>• Biofeedback</td>
</tr>
<tr>
<td>• Exercise</td>
<td>• Chiropractic manipulation</td>
</tr>
<tr>
<td>• Musculoskeletal exercises ≥2x/week</td>
<td>• Hypnotherapy</td>
</tr>
<tr>
<td>• Individualized aerobic exercise programs</td>
<td>• Homeopathic treatment</td>
</tr>
<tr>
<td>• Individualized stretching programs</td>
<td>• Therapeutic massage</td>
</tr>
<tr>
<td>• Muscular strengthening programs</td>
<td>• Global postural reeducation</td>
</tr>
<tr>
<td>• Physical therapy</td>
<td>• Pilates</td>
</tr>
<tr>
<td>• Psychotherapeutic support</td>
<td></td>
</tr>
<tr>
<td>• Rehabilitation</td>
<td></td>
</tr>
<tr>
<td>• Relaxation</td>
<td></td>
</tr>
</tbody>
</table>
Non-pharmacological Treatment of Fibromyalgia: EULAR Guidelines

2nd line
- Heated pool treatment, with or without exercise

3rd line
- Individually tailored exercise programs, with aerobic exercise and strength training
- Physiotherapy
- Psychological support
- Rehabilitation
- Relaxation

4th line
- Cognitive behavioral therapy

EULAR = European League Against Rheumatism
Non-pharmacological Treatment of Fibromyalgia: AMWF Guidelines

<table>
<thead>
<tr>
<th>Recommended</th>
<th>Not Recommended</th>
</tr>
</thead>
</table>
| • Acupuncture  
• Biofeedback  
• Cognitive behavioral therapy  
• Functional training  
• Meditative movement therapies | • Chiropractic  
• Cold therapy  
• Homeopathy  
• Laser  
• Magnetic field therapy  
• Massage |

| • Multicomponent therapy  
• Patient and psychological education  
• Strength training | • Mindfulness-based stress reduction as sole treatment  
• Reiki  
• Therapeutic writing  
• Transcranial direct current stimulation |

<table>
<thead>
<tr>
<th>No Positive or Negative Recommendation</th>
<th></th>
</tr>
</thead>
</table>
| • Elimination diet, vegetarian diet or therapeutic fasting  
• Exercise therapy  
• Foot reflexology massage therapy  
• Full body heat treatment | • Lymphatic drainage  
• Osteopathy  
• Physiotherapy  
• Ultrasound/electrotherapy |

AMWF = Association of the Scientific Medical Societies in Germany
Non-pharmacological Treatment of Fibromyalgia: Hong Kong MPNP Recommendations

- Cognitive behavioral therapy
- Lifestyle changes:
  - Balanced diet
  - Meditation/relaxation techniques
  - Sleep hygiene
- Physical therapy:
  - Exercise (aerobic exercise, strength training)
  - Hydrotherapy or aquatherapy
  - Occupational/physiotherapy
- Trigger point injection

MPNP = Multidisciplinary Panel on Neuropathic Pain
Pharmacological Treatment
Central Sensitization Produces Abnormal Pain Signaling

Pain treatment options
- $\alpha_2\delta$ ligands
- Antidepressants

Increased release of pain neurotransmitters: glutamate and substance P

Increased neuronal excitability

Minimal stimuli

Nociceptive afferent fiber

Spinal cord

Brain

Perceived pain (hyperalgesia/allodynia)

Pain amplification

Loss of Inhibitory Control: Disinhibition

Pain treatment options
- $\alpha_2\delta$ ligands
- Antidepressants

Note: gabapentin and pregabalin are $\alpha_2\delta$ ligands
\( \alpha_2\delta \) Ligands Bind to \( \alpha_2\delta \) Subunit of Voltage-Gated Calcium Channels

Note: gabapentin and pregabalin are \( \alpha_2\delta \) ligands

Arikkath J, Campbell KP. *Curr Opin Neurobio* 2003; 13(3):298-307;
α₂δ Ligands Reduce Calcium Influx in Depolarized Human Neocortex Synaptosomes

* * *  
*p <0.05 vs. vehicle

Vehicle

Concentration (μM)

Ca²⁺ fluorescence (% of control)

Fink K et al. Neuropharmacology 2002; 42(2):229-36.
$\alpha_2\delta$ Ligands Modulate Calcium Channel Trafficking

- $\alpha_2\delta$ ligands reduce trafficking of voltage-gated calcium channel complexes to cell surface in vitro
- $\alpha_2\delta$ ligands prevent nerve-injury induced up-regulation of $\alpha_2\delta$ in the dorsal horn

BCH = 2-(-)endoamino-bicycloheptene-2-carboxylic acid; ER = endoplasmic reticulum; GBP = gabapentin
### Adverse Effects of $\alpha_2\delta$ Ligands

<table>
<thead>
<tr>
<th>System</th>
<th>Adverse effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digestive system</td>
<td>Dry mouth</td>
</tr>
<tr>
<td>CNS</td>
<td>Dizziness, somnolence</td>
</tr>
<tr>
<td>Other</td>
<td>Asthenia, headache, peripheral edema, weight gain</td>
</tr>
</tbody>
</table>

$\alpha_2\delta$ ligands include gabapentin and pregabalin

*CNS = central nervous system*

How Antidepressants Modulate Pain

- Inhibiting reuptake of serotonin and norepinephrine enhances descending modulation.

# Suggested Mechanisms of Analgesic Action of Antidepressants

<table>
<thead>
<tr>
<th>Mechanism of Action</th>
<th>Site of Action</th>
<th>TCA</th>
<th>SNRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reuptake inhibition</td>
<td>Serotonin</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Noradrenaline</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Receptor antagonism</td>
<td>α-adrenergic NMDA</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Blocking or activation of ion channels</td>
<td>Sodium channel blocker</td>
<td>+</td>
<td>(+) venlafaxine/duloxetine</td>
</tr>
<tr>
<td></td>
<td>Calcium channel blocker</td>
<td>+</td>
<td>?</td>
</tr>
<tr>
<td></td>
<td>Potassium channel activator</td>
<td>+</td>
<td>?</td>
</tr>
<tr>
<td>Increasing receptor function</td>
<td>GABA&lt;sub&gt;B&lt;/sub&gt; receptor</td>
<td>+ amitripline/desipramine</td>
<td>?</td>
</tr>
<tr>
<td>Opioid receptor binding/opioid-mediated effect</td>
<td>Mu- and delta-opioid receptor</td>
<td>(+)</td>
<td>(+) venlafaxine</td>
</tr>
<tr>
<td>Decreasing inflammation</td>
<td>Decrease of PGE2 production</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>decrease of TNFα production</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

GABA = γ-aminobutyric acid; NDMA = N-methyl-D-aspartate; PGE = prostaglandin E; SNRI = serotonin-norepinephrine reuptake inhibitor; TCA = tricyclic antidepressant; TNF = tumor necrosis factor

# Adverse Effects of Antidepressants

<table>
<thead>
<tr>
<th>System</th>
<th>TCAs</th>
<th>SNRIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digestive system</td>
<td>Constipation, dry mouth, urinary retention</td>
<td>Constipation, diarrhea, dry mouth, nausea, reduced appetite</td>
</tr>
<tr>
<td>CNS</td>
<td>Cognitive disorders, dizziness, drowsiness, sedation</td>
<td>Dizziness, somnolence</td>
</tr>
<tr>
<td>Cardiovascular</td>
<td>Orthostatic hypotension, palpitations</td>
<td>Hypertension</td>
</tr>
<tr>
<td>Other</td>
<td>Blurred vision, falls, gait disturbance, sweating</td>
<td>Elevated liver enzymes, elevated plasma glucose, sweating</td>
</tr>
</tbody>
</table>

CNS = central nervous system; TCA = tricyclic antidepressant; SNRI = serotonin-norepinephrine reuptake inhibitor
IASP: Pharmacological Treatment for Fibromyalgia

Level 1
- A
  - Amitriptyline
  - Duloxetine
  - Milnacipran
  - Pregabalin
- B
  - Gabapentin

Level 2
- A
  - Cyclobenzapine
  - Fluoxetine
- B
  - Paroxetine
  - Tramadol

IASP = International Association for the Study of Pain
Pharmacological Treatment of Fibromyalgia: APS Guidelines

1st line
- TCAs (amitriptyline, cyclobenzaprine)

2nd line
- $\alpha_2\delta$ ligands (pregabalin)
- SNRIs (duloxetine, milnacipran, venlafaxine)
  - SSRIs (fluoxetine)
  - Weak opioids (tramadol)

3rd line
- 5-hydroxytryptamine
- Growth hormone
  - Tropisetron
  - S-adenosyl-methionine

APS = American Pain Society; SNRI = serotonin norepinephrine reuptake inhibitor; SSRI = selective serotonin reuptake inhibitor; TCA = tricyclic antidepressant

Pharmacological Treatment of Fibromyalgia: Canadian Guidelines

**1st line**
- $\alpha_2\delta$ ligands (e.g., pregabalin)
- TCAs (e.g., amitriptyline)
- SNRIs (e.g., duloxetine)
- SSRIs (e.g., paroxetine)

**2nd line**
- Weak opioids (e.g., tramadol) should be reserved for patients with moderate to severe pain that is unresponsive to other treatment modalities

**3rd line**
- Cannabinoids (e.g., nabilone) may be considered, particularly in the setting of important sleep disturbance

SNRI = serotonin norepinephrine reuptake inhibitor; SSRI = selective serotonin reuptake inhibitor; TCA = tricyclic antidepressant

## Pharmacological Treatment of Fibromyalgia: Brazilian Consensus

<table>
<thead>
<tr>
<th>Recommended</th>
<th>Not Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>• α₂δ ligands: gabapentin, pregabalin</td>
<td>• Benzodiazepines: clonazepam, alprazolam</td>
</tr>
<tr>
<td>• Anti-Parkinson medication: pramipexole</td>
<td>• Corticosteroids</td>
</tr>
<tr>
<td>• MAOI antidepressants: moclobemide</td>
<td>• nsNSAIDs/coxibs</td>
</tr>
<tr>
<td>• Non-benzodiazepine hypnotics: zopiclone, zolpidem</td>
<td>• SSRIs: citalopram, escitalopram, paroxetine, sertraline</td>
</tr>
<tr>
<td>• SNRIs: duloxetine, milnacipran</td>
<td>• Strong opioids</td>
</tr>
<tr>
<td>• SSRI:s: fluoxetine</td>
<td>• TCAs: clomipramine, imipramine</td>
</tr>
<tr>
<td>• TCAs: amitriptyline, cyclobenzaprine, nortriptyline</td>
<td>• Tinazidine</td>
</tr>
<tr>
<td>• Tropisetron</td>
<td>• Topiramate</td>
</tr>
<tr>
<td>• Weak opioids: tramadol</td>
<td></td>
</tr>
</tbody>
</table>

Coxib = COX-2-selective inhibitor; MAOI = monoamine oxidase inhibitor; nsNSAID = non-selective non-steroidal anti-inflammatory drug; SNRI = serotonin norepinephrine reuptake inhibitor; SSRI = selective serotonin reuptake inhibitor; TCA = tricyclic antidepressant

Pharmacological Treatment of Fibromyalgia: EULAR Guidelines

**Recommended**
- $\alpha_2\delta$ ligands (pregabalin)
- Antidepressants (amitriptyline, fluoxetine, duloxetine, milnacipran, moclobemide, pirlindole)
- Pramipexole
- Tramadol
- Tropisetron

**Not recommended**
- Corticosteroids
- Strong opioids

**May be considered**
- Simple analgesics (acetaminophen)
- Other weak opioids

EULAR = European League Against Rheumatism
## Pharmacological Treatment of Fibromyalgia: AMWF Guidelines

<table>
<thead>
<tr>
<th>Recommended</th>
<th>Not Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Amitriptyline</td>
<td>• MAOIs</td>
</tr>
<tr>
<td>• Duloxetine, with comorbid depression or anxiety</td>
<td>• Sodium oxybate</td>
</tr>
<tr>
<td>• Pregabalin</td>
<td>• Neuroleptics</td>
</tr>
<tr>
<td>• SSRIs (fluoxetine, paroxetine), with comorbid depression</td>
<td>• Non-steroidal antirheumatics</td>
</tr>
<tr>
<td></td>
<td>• Muscle relaxants</td>
</tr>
<tr>
<td></td>
<td>• Strong opioids</td>
</tr>
<tr>
<td></td>
<td>• Tropesitron</td>
</tr>
<tr>
<td></td>
<td>• Virostatics</td>
</tr>
<tr>
<td>• Anxiolytics</td>
<td>• Cannabinoids</td>
</tr>
<tr>
<td>• Dopamine agonists</td>
<td>• Flupirtine</td>
</tr>
<tr>
<td>• Hormones</td>
<td>• Ketamine</td>
</tr>
<tr>
<td>• Hypnotics</td>
<td>• Local anesthetics</td>
</tr>
<tr>
<td>• Ketamine</td>
<td>• Milnacipran</td>
</tr>
<tr>
<td>• Local anesthetics</td>
<td></td>
</tr>
<tr>
<td>• Milnacipran</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No Positive or Negative Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Acetaminophen</td>
</tr>
<tr>
<td>• Metamizole</td>
</tr>
<tr>
<td>• Weak opioids</td>
</tr>
</tbody>
</table>

AMWF = Association of the Scientific Medical Societies in Germany; MAOI = monoamine oxidase inhibitor; SSRI = selective serotonin reuptake inhibitor

Pharmacological Treatment of Fibromyalgia: Hong Kong MPNP Recommendations

- α2δ ligands (gabapentin, pregabalin)
- SNRIs (duloxetine, milnacipran)
- TCAs (amitriptyline, cyclobenzaprine)
- Tramadol

MPNP = Multidisciplinary Panel on Neuropathic Pain;
SNRI = serotonin norepinephrine reuptake inhibitor; TCA = tricyclic antidepressant

Non-adherence to Medication in Fibromyalgia

<table>
<thead>
<tr>
<th>Non-adherence to medication</th>
<th>n (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did you forget to take your medication?</td>
<td>31 (24.4)</td>
</tr>
<tr>
<td>Were you careless at times about taking your medication?</td>
<td>26 (20.5)</td>
</tr>
<tr>
<td>When you felt better, did you sometimes stop taking your medication?</td>
<td>25 (19.7)</td>
</tr>
<tr>
<td>If you felt worse when you took your medication, did you sometimes stop taking your medication?</td>
<td>25 (19.7)</td>
</tr>
<tr>
<td><strong>Endorsement of at least one item</strong></td>
<td>60 (47.2)</td>
</tr>
</tbody>
</table>

*127 women were surveyed

Strategies to Improve Adherence

- Simplify regimen
- Impart knowledge
- Modify patient beliefs and human behavior
- Provide communication and trust
- Leave the bias
- Evaluate adherence

Simplifying Medication Regimen

• If possible, adjust regimen to minimize:
  – Number of pills taken
  – Number of doses per day
  – Special requirements (e.g., bedtime dosing, avoiding taking medication with food, etc.)

• Recommend all medications be taken at the same time of day (if possible)
• Link taking medication to daily activities, such as brushing teeth or eating
• Encourage use of adherence aids such as medication organizers and alarms

Imparting Knowledge

- Provide clear, concise instructions (written and verbal) for each prescription
- Be sure to provide information at a level the patient can understand
- Involve family members if possible
- Provide handouts and/or reliable websites for patients to access information on their condition
- Provide concrete advice on how to cope with medication costs

# Modifying Patient Beliefs and Behaviors: Motivational Interviewing Technique

<table>
<thead>
<tr>
<th>Techniques</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Express empathy</td>
<td>“It’s normal to worry about medication side effects”</td>
</tr>
<tr>
<td>Develop discrepancy</td>
<td>“You obviously care about your health; how do you think not taking your pills is affecting it?”</td>
</tr>
<tr>
<td>Roll with resistance</td>
<td>“I understand that you have a lot of other things besides taking pills to worry about”</td>
</tr>
<tr>
<td>Support self efficacy</td>
<td>“It sounds like you have made impressive efforts to work your new medication into your daily routine”</td>
</tr>
</tbody>
</table>

Providing Communication and Trust: Communication Tips

• Be an active listener
  – Focus on the patient
  – Nod and smile to show you understand

• Make eye contact

• Be aware of your own body language
  – Face the patient
  – Keep arms uncrossed
  – Remove hands from pockets

• Recognize and interpret non-verbal cues

Leaving the Bias

Learn more about how low health literacy can affect patient outcomes.

Specifically ask about attitudes, beliefs and cultural norms with regards to medication.

Tailor communication to patient’s beliefs and level of understanding.

Acknowledge biases.

Evaluating Adherence: 4-Step Strategy for Detecting Non-adherence

1. Ask an open-ended question about taking medicine
2. Normalize and universalize non-adherence to reverse the judgmental environment
3. Make the role of accurate information about adherence in medical decision-making explicit
4. Don’t ask about “forgetting” or “missed” doses until the first 3 steps have set the stage

Conviction and Confidence: A Model for Successful Interventions

- Patient conviction (i.e., sense of the patient’s personal, emotional recognition of the benefits of changing a behavior)
  - “Is increasing your physical activity a priority for you?”
  - Increase conviction by getting patients to articulate benefits of change
- Patient confidence (i.e., sense of the patient’s ability to modify a behavior)
  - “If you did decide to become physically active, how confident are you that you would be able to follow though?”
  - Increase confidence by identifying barriers to change and helping patients overcome those barriers by identifying their own solutions

Conviction – Confidence Model

- Conviction:
  - 0: Powerless
  - 10: Unwavering

- Confidence:
  - 0: Unconvinced
  - 10: Convincing

- Benefits
- Barriers

Summary
Management: Summary

• Set realistic treatment goals and manage patient expectations

• Incorporate both pharmacological and non-pharmacological strategies

• Use non-pharmacological treatments first

• Use medical therapies that target pain and have evidence for efficacy in fibromyalgia as first-line pharmacotherapy
  – Balance medication side effects and risk with optimizing function
  – Chose medications that target the most troublesome symptoms
  – Start low, go slow – reassure patients