Down But Not Out: Depression & Pain Assessment

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Overview

- Signs and symptoms of depression
- Signs and symptoms of pain
- Complications in pain and/or depression
- Supports for people with depression and/or pain
What are we looking for?

- Changes
  - Acute!
  - Chronic…
- Persisting symptoms
- Differentiating habits from symptoms
What Behaviors Suggest Pain?

- Direct observation or history from caregivers
  - Assessment by proxy—nursing assistants or family members or regular caregivers
- Observe during movement (walking, morning care, transfers)
- Unusual behavior should trigger assessment of pain
Pain Indicators—at rest and with movement

Vocal complaints: Non-verbal (Expression of pain, not in words, moans, groans, grunts, cries, gasps, sighs)

Facial Grimaces/Winces: (Furrowed brow, narrowed eyes, tightened lip jaw drop, clenched teeth, distorted expressions)

Bracing: (Clutching or holding onto side rails, bed, tray table, or affected area during movement)


Pain Indicators —at rest and with movement

Restlessness: (Constant or intermittent shifting of position, rocking, intermittent or constant hand motions, inability to keep still)

Rubbing: (Massaging affected area)

(In addition, record Verbal complaints)

Verbal: (Words expressing discomfort or pain, "ouch" "that hurts"; cursing during movement, or exclamations of protest “stop”; “that’s enough”)
Less-obvious Pain Indicators

- May be attributed to psychosis or dementia
  - Aggressive behavior
  - Fidgeting
  - Noisy breathing
  - Rapid blinking
  - Rigid, tense body posture
- Untreated pain can increase confusion
- Patients on opioids at risk for dose being cut
Assume Pain is Present

- Assume Pain is Present
- Is there a painful stimulus
  - Surgical incision
  - Fracture
  - Painful procedure
  - Any tissue damage
- If so, treat
  - Observe
Pain Indicator for Communicatively Impaired Children (PICIC)

Most common cues identified by 67 parents:

- Screwed up or distressed looking face
- Crying with or without tears
- Screaming, yelling, groaning, moaning
- Stiff or tense body
- Difficult to comfort or console
- Flinches or moves away if touched

Common Pain Behaviors in Cognitively Impaired Elderly Persons

- Facial expressions
- Verbalizations, vocalizations
- Body movements
- Changes in interpersonal interactions
- Changes in activity patterns or routines
- Mental status changes
Organizing Your Observations

- **J** = judgment
- **O** = orientation
- **M** = memory
- **A** = affect
- **C** = cognition
- **C** = communication
- **S** = somatics
About 1 in 5 adults over age 18 have significant depression
Depression is one of the 10 leading causes of disability in the United States
Depression is frequently undiagnosed
Depression is more likely to be overlooked in those with developmental delays
Causes of Depression

- Biological vulnerability
- Psychological vulnerability
- Medical illnesses--stroke, heart attack, Parkinson’s disease, cancer, thyroid disease, etc.
- Environmental factors--loss, poverty, victimization
Remember:

- Depression is a *treatable* condition in the general population
- It is also treatable among those with developmental disabilities
Depression According to DSM-IV TR and ICD-10

---- subject to change

- Five or more of the following symptoms have been present during the same two week period and represent a change from previous functioning
Symptoms

- Depressed mood (feeling sad or empty) most of the day, nearly every day, by client report or by observation. (Patient is tearful)
- Irritable mood is commonly seen in children, adolescents, and people with developmental disabilities
- Markedly diminished interest or pleasure in most activities
Symptoms

• Significant weight loss when not dieting or weight gain; significant change in appetite nearly every day
• Insomnia or hypersomnia nearly daily
• Changes in motor behavior: agitation or slowing—observable by others
• Fatigue or loss of energy
**Symptoms**

- Daily feelings of worthlessness or extreme guilt—may be delusional or have hallucinations
- Diminished ability to think or concentrate; indecisiveness
- Recurrent thoughts of death or suicide; recurrent thoughts of suicide plan
- Suicide attempt
Vegetative Symptoms

- Sleep
- Appetite
- Weight
- Energy
- Bowel functioning
- Sexual appetite
Symptom Summary

- Symptoms cause clinically significant distress or impairment in usual areas of functioning
- Symptoms are not due to effects of substance or general medical condition
- Not better accounted for by Bereavement
Types of Pain

- Nociceptive vs Neuropathic
- Physiologic vs pathophysiologic
- Acute vs chronic
- Malignant vs nonmalignant
- Pain syndromes
Nociceptive Pain (Acute Pain/Physiologic Pain)

Pain resulting from activation of primary afferent nociceptors by mechanical, thermal or chemical stimuli
Neuropathic pain
Pathophysiological Pain

• Pain resulting from damage to peripheral nervous or central nervous system tissue or from altered processing of pain in the central nervous system
Neuropathic — Pathophysiologic Pain

- Results in cellular changes that occur in peripheral and central nervous systems
  - Results in sensitization to the transmission of pain signals
- Neuroplasticity — ability of neurons to change their structure and function
- Peripheral and central sensitization — response to stimuli is increased
Result of Central and Peripheral Changes

- Hyperalgesia
  - Primary hyperalgesia
  - Secondary hyperalgesia
- Allodynia
- 'wind-up' of C fibers (a phenomenon of progressively increased neural response to repeated noxious stimuli)
The ABCs of PainS

Affective Dimension
Behavioral Dimension
Cognitive Dimension
Physiological-Sensory Dimension
Spiritual Dimension
Treatment Approaches

- Strategies for assessment of depression
  - Support
  - Motivation
  - Change in interests
Emotional Release

- Music, art
  - Creative expression; mood expression
- Social expressiveness
  - Is there a chance to share?
- Friendships
  - People who listen & care
  - Reciprocity
Emotional Release

- Being valued as a productive member of society
  - Greeted in public
  - Team (social) fun/joy
- Work – paid or volunteer
- Community membership
Interpersonal connection

- Individual Therapy
  - Supportive
  - Psychodynamic
  - Rate matches individual’s capacity for intensity

- Group Therapy
  - Gender; Specific problem
  - Size, frequency, safety
Interpersonal connection

- Behavior Therapy
  - DBT: structured assignments; stepwise; relearning the personal meaning of symptoms
  - CBT: particularly helpful for anxiety disorders
- Art Therapy
  - Expression within context; use of different media; therapist present!
Physiologic Factors

- Diet
  - Sugar; caffeine; sedatives...
  - High-low see-sawing creates depression, amplifies pain

- Food intake
  - Frequency; balanced; interesting
Physiologic Factors

- Medical conditions
  - Chronic pain conditions
    - Skeletal, muscular
    - Oxygenation
  - Secondary depression
  - Thyroid functioning
  - Energy metabolism
  - Obesity
    - Mobility; gravitational effects
  - Cancer
Fitness effects

- Regular aerobic exercise
  - Oxygen utilization, circulation
  - Strength, balance
  - Outlook

- Relaxation techniques
  - Visualization, desensitization
  - Meditation
  - Yoga, stretching
Sleep hygiene
- Decrease stimulation before bed
- Avoid awake activities in same location
- Lighting: dim – dark; enough for orientation when day/night cycles easily confused

Regular, sufficient sleep
- Individual variability
- Broken periods as increase in age

Assure no sleep apnea
Therapeutics

- Medications
  - Effects overlap
- Procedures
  - Depression
  - Pain: TENS
- Alternative therapies
Medications & Treatment

- **Antidepressants**
  - SSRI, SNRI, TCA, MAOI
  - ECT, DBS, TMS

- **Anxiolytics**
  - BZD, SSRI, a-blocker, b-blocker
  - Alcohol, opiates
Medications

- Augmenting strategies
- Combinations of medications
- Adding lithium, antipsychotic, anxiolytic medications
- Use of CAM

(complementary and alternative medicine)
Alternative therapies

- Acupuncture
- Massage therapy
- Aroma therapy
- Herbal therapy
- Ayurvedic therapy
How do we approach treatment?...

- Context
- Functionality
- Integrating preferences and “what’s good for you”
Definition of Pain

“Unpleasant sensory and emotional experience arising from actual or potential tissue damage or described in terms of such damage”
Medication Management--Analgesics

Analgesics
Three Types

- Nonopioids (acetaminophen, NSAIDS)
- Opioids (mu agonist, agonist-antagonist)
- Adjuvants (multiple examples) & Anesthetics
Acetaminophen

- Mechanism of action is not certain
- Probably centrally acting—?cox-3 inhibitor
- Acetaminophen toxicity
  - Hepatotoxicity
    - Toxic metabolite (NAPQI)
    - Several other mechanisms lead to hepatotoxicity
    - Mechanism not completely understood
  - Nephrotoxicity >4g/day for long periods
    - Uncertain cause
    - May be caused by activity of NAPQI in renal microsomes
    - Increase frequency to 6-8 hrs in renal failure
NSAIDS

- NSAIDS—Antiinflammatory, antipyretic, analgesic
- Mechanism of action—prostaglandin inhibition by way of COX-1
  - Prostaglandins
    - important in maintaining integrity of GI and duodenal mucosa
    - Important in modulating renal plasma flow
- NSAIDs inhibit formation of thromboxane—effecting platelet aggregation
- Use with caution in pts. with history of asthma
  - Inhibits prostaglandin E—responsible for bronchodialation
The neural mechanisms by which pain is perceived involve a process that involves four major steps:

1. Transduction
2. Transmission
3. Modulation
4. Perception
Transduction: Nociceptive Chemical Stimuli

Arachidonic cascade

Phospholipids released

Trauma

5-Lipoxygenase

Cyclo-oxygenase

Leukotrienes

Prostaglandins

PGI2

PGE2

PGF2

Vasodilation

Antiaggregation

Fever

Pain

Vasodilation

Uterine contraction

Thromboxane A2 platelet aggregation

Pain receptor
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<th>Class</th>
<th>Generic name</th>
<th>UAD</th>
<th>Brand name</th>
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<tr>
<td>Proprionic acids</td>
<td>Naproxen</td>
<td>500 mg initially-followed by 250mg q6-8h</td>
<td>Naprosyn, Anaprox, Alleve</td>
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<tr>
<td></td>
<td>Flurbiprofen</td>
<td></td>
<td>Ansaid</td>
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<tr>
<td></td>
<td>Oxaprozin</td>
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<td>Daypro</td>
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<td></td>
<td>Ibuprofen</td>
<td>400-800mgQ6-8h</td>
<td>Motrin</td>
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<td>Ketoprofen</td>
<td>25-75 mg Q6-8h</td>
<td>Orudis, Oruvail</td>
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<td></td>
<td>Ketorolac</td>
<td>Max 120mg/d (parenteral)</td>
<td>Toradol</td>
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<td>Indoleacetic acids</td>
<td>Sulindac</td>
<td>200mg Q12h</td>
<td>Clinoril</td>
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<td>Indomethacin</td>
<td>25-50mg q8h</td>
<td>Indocin</td>
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<td></td>
<td>Etodolac</td>
<td>200-40mg q6-8h</td>
<td>Lodine</td>
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<tr>
<td>Phenylacetic acids</td>
<td>Diclofenac</td>
<td>50 mg/q8h</td>
<td>Cataflam, Voltaren</td>
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<td>Salicylic acids</td>
<td>Salsalate</td>
<td>1000-1500 mg/q12h</td>
<td>Disalcid</td>
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<tr>
<td>(nanacetylated)</td>
<td>Choline magnesium trisalicylate</td>
<td>1000-1500 mg/q12h</td>
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<td>Nabumetone</td>
<td>1000-2000 mg/day</td>
<td>Relafen</td>
</tr>
<tr>
<td>oxicam</td>
<td>Piroxicam</td>
<td></td>
<td>Feldene</td>
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COX-2 Inhibitors

- May have fewer GI effects than COX-1 inhibitors
- Should be avoided in patients with creatinine clearance <30ml/min
  - Carry same risk as traditional NSAIDs
- Celecoxib—Celebrex
  - UAD=100-200 mg q12h max=400 mg/d
Characteristics of Opioids

- No ceiling effect
- Usually no end organ damage with chronic use
- Metabolized by the liver
  - Metabolite toxicity
    - Avoid using meperidine and propoxyphene
- Excreted by the kidney
- Cause tolerance and physical dependence
- Reversible with an antagonist
- Bind to opiate receptors—\(\mu, \kappa, \delta\)
- Tolerance to side effects except constipation
Pharmacokinetics

- Absorption
  - Drug solubility—lipophilic vs hydrophilic
- Bioavailability
- First pass Effect
- Solubility
- Metabolism → metabolites, active or inactive
  - Prodrugs, e.g. codeine metabolized by CYP450 enzyme CYP2D6
- Half-life, clearance, steady state and accumulation
Pharmacodynamics

- Opioid responsiveness
  - Efficacy—extent to which a drug “works” (as compared to others)
  - Potency—the dose of a drug required to produce a specified effect, e.g. hydromorphone > potency than morphine
  - Opioid responsiveness—affected by age, organ dysfunction
- Tolerance—rule out disease progression; compliance to tx
- Physical dependence
Less than perfect

- Multiple causes simultaneously
- Medication interactions
- Progressive decline or degeneration
- Identify what can be changed or improved
Mores, Morals, and Morale

- Social expectations
  - I/DD does not predict experience
  - Appropriate standards (+/-)
- Values and ethics
  - Respect, boundaries, supports
  - Maintain safe practices
- Keeping engaged
  - Abiding with a person in pain
  - Self-care & self-awareness
Assessment challenges

- Even when a person has verbal language skills, observers have to be keyed into behavioral indicators.
- People with I/DD have learned that their ways of reporting their experience(s) may be disregarded.
Assessment challenges

• Case example:
  • Female, 40’s; deteriorating over months → lots of medical evaluations = no etiology!
  • Learned she had specific physical findings
    • Embarrassed to reveal, “too personal” {uterine}
    • Didn’t think anyone would listen
  • Pain ever-present; Disregard ever-present;
    Anxiety and old ways of feeling.
Assessment clues

- Pain and depression (in combination) move people toward regression
Assessment clues

- Everyone has observations & has a voice
- Need to learn to articulate their observations about pain, depression, anxiety...
- Direct care staff – often have greatest opportunities for direct observations, and have the least confidence
Frequency of symptoms

• Typical “behaviorist”
  • Teaching residents of institution;
    • some expressive language abilities, some receptive language capabilities.
  • Taught emotional states: happy-sad-afraid-angry.
  • What feel most of time? Sad = 80%.

• Other behavioral consultant
  • Same emotional state training, more contextual
  • What feel most of time? “mad” = 75%
Alteration in attention, energy

- Pain interrupts concentration; attention
- Pseudo-dementia
- Decreased cognitive activity
- Decreased social interactions
- Withdrawal
Changes in sleep

- May attempt to sleep more
  - Taking naps to deal with fatigue
  - Avoid situations that are painful, induce sadness
- Interrupted sleep patterns
  - Accompanied by increased irritability when awake
- Change in sleep position
  - Sitting more upright
Guarding

- Areas vulnerable or hurting
- "Splint" to prevent change/possible increase in pain
- Prevent access
Pattern Changes

- A change from typical patterns is reason to start looking further
- Possible associations:
  - Hitting head ~ headache, earache
  - Avoiding lights/noise ~ migraine
  - Biting fist ~ GERD, stomach discomfort
  - Avoiding foods ~ throat problems, GI pain
  - Increase carbohydrates ~ depression, fatigue
Irritability = masquerader

- Can mask many symptoms/conditions
  - Increased anxiety
  - Despair
  - Chronic pain
  - “a good offense is your best defense”
Pain Disappears

- When have chronic, severe pain – perception of pain is altered and may be ignored
  - Once no longer acute, chronic pain can become the “new norm”
  - If chronic pain is removed, what is this new state?...May not be recognized as pleasant.
Sadness may be ok

- Withdrawal is a form of rejuvenation of energy and spirit
- Closeness to people who have died
- Honest awareness of losses
  - Hope for future engagement in living
Feed-forward loops

- Depression
- Pain
Adapt your skills

- Importance of asking questions
- Everyone has experience
- Develop a way to learn what the patient/client means by their actions
  - "that’s how they’ve always been"
    --- DOESN’T CUT IT!!!
Thank you for your attention ~