#### <u>The Role of a Pharmacist in the</u> <u>Management of Patients with Chronic</u> <u>Pain</u>

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#### Learning Objectives

- Initiate strategies to migrate pharmacy pain management services from medication gate-keeper to an integrated health team patient-centered care practice
- Employ rational strategies for developing therapeutic treatment plans and establishing clinical pharmacy pain management services
- Apply best practices recommendations for the treatment of patients with non-malignant chronic pain

#### Learning Objectives (cont.)

- Recommend and implement multi-modal non-opioid pain management strategies for developing safe and effective therapeutic treatment plans
- Identify Indian Health Service specific key resources and programs for maintaining most current non-malignant chronic pain clinical best practices and policy information.

#### Disclaimer

- The opinions and conclusions expressed today are those of the author and do not necessarily represent the views of the Department of Health and Human Services, US Public Health Service, the Indian Health Service or the Ho-Chunk Nation.
- No financial disclosures to report.

#### Case #1

- Patient A is a 37 y.o. male with a history of low back pain and radiculopathy
- <u>Social Hx</u>: Married with 2 children; Construction worker x 20 years; Tobacco use: I ppd; EtOH use: social (I-2 drinks/week).
- <u>Medications</u>: Oxycodone/APAP 5/325mg I-2 tabs every four to six hours prn; Gabapentin 300mg I capsule three times daily.
- Presents to pharmacy on Friday afternoon asking for an early refill of Oxycodone/APAP; refill is 4 days early. Med profile review reveals 3 early refills within past 6 months
- What are your initial reactions and recommendations? <sup>5</sup>

Case #I

#### "Gate-keeper" Response

- Confirm controlled substance agreement/pain contract is current
- Perform a Prescription Drug Monitoring Program (PDMP) query
- Interview the patient and ascertain reason for the recent early refills
- Consult the primary care provider to obtain authorization or denial for early refill
- Inform the patient that this medication is not eligible for dispense until 5 days from today

## Epidemiology

- Institute of Medicine (2011)
  - 116 million Americans suffer from Chronic Pain
- American Academy of Pain Medicine
  - A Blueprint for Transforming Prevention, Care, Education, and Research: "pain is a significant public health problem that costs at least \$560-635 billion annually..."

#### Incidence of Pain:

American Academy of Pain Medicine

Condition	Number of Sufferers	Source
Chronic Pain	100 million Americans	Institute of Medicine of The National Academies ( <u>2</u> )
Diabetes	25.8 million Americans (diagnosed and estimated undiagnosed)	American Diabetes Association ( <u>3</u> )
Coronary Heart Disease (heart attack and chest pain) Stroke	<ul><li>16.3 million Americans</li><li>7.0 million Americans</li></ul>	American Heart Association ( <u>4</u> )
Cancer	II.9 million Americans	American Cancer Society ( <u>5</u> )

## Acute v. Chronic Pain

- Acute Pain
  - Tissue injury
  - Pain that serves a purpose
  - A warning signal
  - Protective
  - Typically easily diagnosable

- Chronic Pain
  - Pain that lasts greater than 3 months duration
  - May or may not be a symptom of underlying disease
  - No longer serves as a warning function

# Types of Pain

- Somatic
  - Pain associated with thermal, chemical, or mechanical stimuli (producing tissue damage)
- Visceral
  - Pain that comes from internal organs
- Neuropathic
  - Pain that arises as a direct consequence of damage to the somatosensory nervous system
- Existential Pain
  - Pain that occurs upon questioning and doubting the value of one's existence as living, sentient being

## Complexity of Pain

- Bio-Psycho-Social Process
- "Pain Processing in the Human Nervous System: A Selective Review of Nociceptive and Biobehavioral Pathways" (Garland, E, Primary Care Clinic Office Practice 2012)
  - Pain is not only a sensory, cognitive, and emotional experience but also involves behavioral reactions that may alleviate, exacerbate, or prolong pain experience

# Complexity of Pain (continued)

- Pain is a very subjective and personal experience
- Tools for assessment
  - Pain Scale
  - Brief Pain Inventory (BPI)
    - Quality of life measures
  - Patient Interview (gold standard)
- Pain is often exacerbated in the presence or worsening of psychosocial comorbidities
  - Mental Health contributions: depression, anxiety, PTSD, etc.
  - Social contributions: financial stresses, relationship stresses, workrelated stresses, etc.
  - Behavioral health counseling is essential for developing positive coping mechanisms for underlying conditions; can significantly improve pain syndrome.

- Non-opioid Therapeutic Strategies
  - Primary Analgesics (Non-Opioid Pain Medications)
  - "Analgesics" according to pharmacological actions
    - Non-Steroidal Anti-inflammatories (NSAIDS)
      - Propionic Acids: Ibuprofen, Naproxen
      - Acetic Acids: Diclofenac, Etodolac, Sulindac, Indomethacin
      - Oxicams: Meloxicam, Piroxicam
      - Nonacidic: Nabumetone
      - COX-2 selective: celecoxib
    - Acetaminophen (APAP)
    - Acetyl Salicylic Acid (ASA)

- Non-opioid Therapeutic Strategies
  - Adjuvant Medications: primary pharmacological effect is not analgesia; secondary effects ameliorate pain

#### Anticonvulsants

 Gabapentin (peripheral neuropathy, diabetic peripheral neuropathy, fibromyalgia), Pregabalin, Carbamazepine (trigeminal neuralgia), Valproic Acid (migraine), Topiramate (trigeminal neuralgia)

#### Antidepressants

 TCA's/Amitriptyline (PHN, DPN), Venlafaxine (\*non-FDA Approved), Duloxetine (DPN)

- Non-opioid Therapeutic Strategies
  - Adjuvant Medications: primary pharmacological effect is not analgesia; secondary effects ameliorate pain
    - Muscle Relaxers/Antispasmodics
      - Cyclobenzaprine, Tizanidine, Baclofen, Methocarbamol, Metaxalone, Orphenadrine
      - Caution: not recommended to use Carisoprodol
        - Metabolizes to meprobamate
          - C-IV depressant exhibits barbiturate-like effects
    - Topicals
      - NSAIDS: Diclofenac, Ketoprofen,
      - Lidocaine (patches, ointment, cream, gel)
      - Capsaicin Cream

- Non-opioid Therapeutic Strategies
  - Central Opioid Agonist/Centrally Acting Analgesic
    - Tramadol
      - Must assess seizure risk and inter-actions with antidepressants
      - Caution: pharmacological properties of mu receptor binding potentiates abuse potential
      - Classified as a controlled substance in some States
      - Use as last line add-on therapy at lowest frequency/quantities

- Opioid Therapeutic Strategies
  - General Concepts
    - Appropriate and effective for acute pain (< 12 wks.) and post-surgical pain management
    - Reserve for intractable pain that is non-responsive or poor response to non-opioid medications with adjunctive therapies.
    - Utilize lowest dose, frequency, and quantity
    - De-challenge or dose decrease if prolonged chronic opioid therapy (COT)
      - Opiate-induced hyperalgesia phenomenon
        - Paradoxical effect: prolonged exposure to opioids can hypersensitize the perception of pain

- Opioid Therapeutic Strategies
  - General Concepts
    - Utilize controlled substance agreements and opiate pain management panels/committees
    - Monitor compliance with routine random SUPERVISED urine drug screening
      - Must order special lab test for methadone and buprenorphine
    - Prescription Drug Monitoring Program (PDMP)
    - Should be reserved as last-line therapy and not recommended as monotherapy for chronic pain
      - Risks: Tolerance, Dependence, latrogenic Addiction, Diversion, Unintentional Overdose, and Death.

- Multi-disciplinary Components
  - Behavioral and Psychological Therapies
    - Mindful CBT, Acceptance and Commitment Therapy (ACT)
  - Physical Therapy/Occupational Therapy
  - Complimentary and Alternative Therapies
    - Meditation, Yoga, Tai Chi, Chi Quong, Biofeedback, Acupuncture, Spiritual practices (individual belief system specific)

#### Resources

- Indian Health Service Pain Management Website
  - Developed by the IHS National Combined Council Prescription Drug Abuse Workgroup
  - Anticipated to be released on public domain in early Spring 2014
  - Provide Indian Health Service pain management best practices
    recommendations
    - Proper Pain Assessment, Adherence Monitoring, Treatment Planning, Opioid Medication Prescribing Safe Practices, Complimentary and Alternative Medicine
  - Will be continually updated and maintained by the NCC PDA workgroup as new best practices are identified

#### Resources

- Indian Health Service Non-Malignant Chronic Pain Policy
  - Final revisions completed by IHS Chief Medical Officers and submitted for approval in March 2014
  - Comprehensive policy outlining policy and procedures for the management of patients with non-cancer pain and updates the Indian Health Service position on pain control and the related use of controlled substances
  - Will be available on the IHS Pain Management Website upon final approval

- Ho-Chunk Nation Health Department Integrated Primary Care/Behavioral Health Service Model
  - Integrated Behavioral Health Program
    - Alcohol and Other Drugs of Abuse (AODA) and Mental Health unified under one division
  - Further integration/collaboration between medical and behavioral health programs (housed within Health Dept.)
    - Integrated Case Management
      - Monthly staffing of most complicated patients/clients
      - Team consists of: MD's, PA-C, PharmD's, Clinic Nurses, Community Health Nurses, Nutritionists, BH staff (SAC, LPC, LSW), Psychologist, Psychiatrist, Social Services Department Staff

- IHS Improving Patient Care (IPC) Team Model
  - Based on the Chronic Care Model by the McColl Institute for Health Care Innovation
  - Integrated Multi-disciplinary Patient Care Model
    - Individualized patient and family centered care
    - Ensure access to primary care for AI/AN people
    - Provide consistent, high-quality care by health care teams
    - Acting on the guidance of the community and Tribal leadership
    - Making positive, sustainable, and measurable improvements in care.
    - Source: <u>http://www.ihs.gov/ipc/index.cfm;</u> Indian Health Service Improving Patient Care website

- Ho-Chunk Nation (HCN) IPC Team for Pain and Addiction Prevention/Treatment
  - <u>Core Team</u>: I MD, I PharmD, and I LPC/SAC
    - Logistics (planning, organizing, and facilitating)
  - <u>Collaborative Team</u>: entire health department staff
  - <u>Objective</u>: Safe and effective management of pain syndromes and substance abuse disorders

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## Ho-Chunk Nation Best Practices

- HCN IPC Pain and Addiction Team Key Concepts/Best Practices- <u>Pain Management</u>
  - De-emphasis of opioids for non-malignant pain
    - Opiate Induced Hyperalgesia- pain symptom paradoxical effects
    - Addiction/Diversion/Overdose prevention- *iatrogenic addiction*
    - Current medical literature suggests ineffective chronic pain treatment
    - Controlled substance policy and random urine drug testing for opioid tx
  - Multi-modal treatment approach
    - Non-opiate and/or minimal opioid medication therapy
    - Physical Therapy/Occupational Therapy
    - Psychotherapy (CBT/Mindfulness): Warriors of Stillness Group Therapy
    - Nutritional Support and Education
    - Spiritual practice (patient's religions preference)

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#### Case #2

- Patient B is a 32 y.o. male with a history of depression, multiple lumbar fusion surgeries for degenerative disc disease, diabetes, and hypertension.
- Social Hx: recent divorce, Tobacco use: 1 <sup>1</sup>/<sub>2</sub> ppd; EtOH use: daily; lives alone with little to no support system; unemployed and filed for disability; prior work as a high-school teacher x 9 years;

#### Case #2

- Medications:
  - Current: Morphine ER 30mg twice daily, oxycodone 5mg four times daily as needed, metformin, lantus, atorvastatin, ASA 81mg, amplodipine, fluoxetine.
    - Only the pain medications have been routinely refilled over past 2 months
- What are your strategies for intervention?

### Case #2:

#### **Integrated Provider**

- Conduct a patient interview
- Consult primary care provider as a patient advocate
- Coordinate an integrated team meeting with patient
- Discuss mental health contributions to chronic medications non-adherence
  - With consent of patient, make a referral to BH
- Make recommendations for dose reductions of opioids due to OIH and tolerance- discuss with patient
- Recommend adjuvant medications and therapies such as physical therapy,

#### **Closing Thought**

<u>Prescription Drug Abuse</u>: Since the problem <u>STARTS</u> with prescribing, it also needs to <u>END</u> with prescribing!



#### **Contact Information**



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