



## **Occupational Therapy and Biopsychosocial Pain Treatment: The “Other Therapy” You Never Knew Your Patients Needed**

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## Title and Affiliation

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# Disclosure

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- Nothing to disclose

# Learning Objectives

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- Compare occupational therapy to other health care professions in its scope and means to address both acute and chronic pain within the biopsychosocial model of pain
- Describe occupational therapy's emphasis on occupational engagement as an intervention and a goal
- Summarize when a patient referral to an occupational therapist is warranted based on their clinical presentation

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## Overview of OT Scope and Pain Management

# Why is Occupational Therapy Beneficial to Those With Pain?

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- Engagement in occupation promotes, facilitates, supports and maintains health and participation.
- Physical, cognitive, psychosocial, sensory-perceptual and other aspects of performance across contexts.
- Self-management & mind-body-spirit connection: health management- knowledge, skills, routines and participation.

American Occupational Therapy Association. Occupational therapy practice framework: Domain and process (4th ed.). Am J Occup Ther. 2020;74(Supplement 2).

# Why is Occupational Therapy Beneficial to Those With Pain?

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*Guiding individuals to integrate new skills and routines within the context of the individual's lived experience is not found in other healthcare professions!*

American Occupational Therapy Association. Occupational therapy practice framework: Domain and process (4th ed.). Am J Occup Ther. 2020;74(Supplement 2).

# Occupational Therapy & Pain Rehabilitation

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- The U.S. Dept. of Health & Human Services recognize occupational therapy as “a restorative therapy” and that “restorative therapies play a significant role *in acute* and chronic pain management, and positive clinical outcomes are more likely if restorative therapy is part of a multidisciplinary treatment plan.” (p. 31).

US Department of Health and Human Services. Pain management best practices inter-agency task force report: Updates, gaps, inconsistencies, and recommendations. 2019. Retrieved from: <https://www.hhs.gov/ash/advisory-committees/pain/reports/index.html>.

- Occupational therapy is the one profession in the treatment of pain to focus on the improvement of participation in valued occupations, with a focus on using the occupation itself as an intervention.

Lagueux É, Dépelteau A, Masse J. Occupational Therapy's Unique Contribution to Chronic Pain Management: A Scoping Review. Pain Res Manag. 2018;2018:5378451. Published 2018 Nov 12. doi:10.1155/2018/5378451



# IASP Curriculum Outline on Pain for OT

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- Anxiety, avoidance, crisis reactions, stress, catastrophizing, life adjustment process
- Spirituality, meaningfulness, hope and hopelessness
- Psychology of unrelieved pain, control and self-efficacy
- Depression, wish to die, suicide
- Occupational performance and quality of life
- Pain communication
- Suffering and pain

IASP Curriculum Outline on Pain for Occupational Therapy. [iasp-pain.org](http://iasp-pain.org).

IASP Curriculum Outline on Pain for Occupational Therapy. IASP ([iasp-pain.org](http://iasp-pain.org)).

Published 2018. Accessed on 6/20/2021.

# Biopsychosocial Model of Pain + Environment & Occupation

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- Application to Occupational Therapy Scope of Practice:
  - Condition Characteristics
  - Sociodemographic Factors
  - Biological Factors; Psychological Factors; Social/Contextual Factors
  - Intermediate Biopsychosocial Outcomes/Rehabilitation Outcomes

Gentry, K., Snyder, K., Barstow, B., Hamson-Utley, J. (2018). The biopsychosocial model: Application to occupational therapy practice. The Open Journal of Occupational Therapy. 2018;6(4). doi:10.15453/2168-6408.1412

# Biopsychosocial Model of Pain + Environment & Occupation

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## ■ The OT Practitioner:

- Top-down approach for client's occupational impact and pain experience.
- Biological, psychological, and social aspects of pain.
- Person, environment, and occupational engagement and pain's impact.
- Focus of intervention: improve participation in valued occupations via occupation itself.

# The Scope of Occupational Therapy...

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- Broad scope when addressing a client's goals:
  - Sensory
  - Cognitive
  - Emotional
  - Physical
- Recommendations from psych wellness team:
  - self-efficacy in coping skills, stress and anxiety management.
- Cognitive behavioral therapy (CBT).
- Acceptance and Commitment Therapy (ACT).
- Promote self-compassion and self-talk.

Hofmann, A.O. American Occupational Therapy Association. Living life to it's fullest™: Managing chronic pain with occupational therapy. 2019. Retrieved from <https://www.aota.org/About-Occupational-Therapy/Professionals/PA/Articles/Chronic-Pain.aspx> on 6/28/2021.

# How Does OT Differ From Other Mental Health Providers?

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- Intersection BETWEEN the Physical, Psychosocial and Environment
- Embracing, Supporting and Guiding the Value of Occupational Engagement for Mental Health and Overall Wellbeing

Hofmann, A.O. American Occupational Therapy Association. Living life to it's fullest™: Managing chronic pain with occupational therapy. 2019. Retrieved from <https://www.aota.org/About-Occupational-Therapy/Professionals/PA/Articles/Chronic-Pain.aspx> on 6/28/2021.

# The Scope of Occupational Therapy...

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- Therapeutic use of self (therapeutic alliance) → statistically significant difference decreased pain, healthcare utilization.
- Rest and sleep as occupational area; training to address sleep hygiene, essential in decreasing pain.
- Education and implementation on relaxation/mindfulness strategies.
- Recommendations for environmental modifications to reduce pain onset.

# The Scope of Occupational Therapy...

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- Client-centered, occupation-based goals.
- Engagement in positive health habits, roles, and routines.
- Proactive problem solving → prevention of pain onset via self-management techniques.
- Compensatory strategies to allow engagement in all areas of occupation, DESPITE having pain (pain self-efficacy).

# The Scope of Occupational Therapy...

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- Graded exposure, decreasing fear-avoidance, pacing and energy conservation all-important daily tasks.
- Intervention/strategies for underlying sensory processing/modulation deficits that may be contributing to pain experience.
- May provide instruction in whole body exercises (yoga, tai chi, etc.).
- Increased focus/skill in treatment of upper extremities/hand therapy.

Hofmann, A.O. American Occupational Therapy Association. Living life to it's fullest™: Managing chronic pain with occupational therapy. 2019. Retrieved from <https://www.aota.org/About-Occupational-Therapy/Professionals/PA/Articles/Chronic-Pain.aspx> on 6/28/2021.



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## **Spotlight On: Occupation-Based Mindfulness**

# Mindfulness and Pain Experience

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## Key Themes Related to Pain:

- Non-reactivity, leaning into pain and bodily sensations.
- Responsive approach to pain management; conscious choice about whether to engage with the experience of pain within occupational performance.
- “Rest into the pain rather than trying to battle through it”: increased capacity to engage in occupations.

Goodman V, Wardrope B, Myers S, Cohen S, McCorquodale L, Kinsella EA. Mindfulness and human occupation: A scoping review. *Scand J Occup Ther.* 2019;26(3):157-170.  
doi:0.1080/11038128.2018.1483422

# Mindfulness and Pain Experience

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## Key Themes Related to Pain:

- Mindful awareness + occupational engagement in the context of pain experience.
- “Suffering caused through our emotional responses to it can be reduced through mindful awareness.” (p. 164)

Goodman V, Wardrobe B, Myers S, Cohen S, McCorquodale L, Kinsella EA. Mindfulness and human occupation: A scoping review. Scand J Occup Ther. 2019;26(3):157-170. doi:0.1080/11038128.2018.1483422

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## OT and Patient Health Management

# Occupation and Activity Based Health Management

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- Evidence-base supports health education/self-management programs
  - ✓ *Reducing pain*
  - ✓ Increasing physical activity
  - ✓ Decrease in disability
- Evidence-base supports OT based individualized health action plans improving ADL function, participation in physical activities.

Arbesman, M., Mosley, L. J. Systematic review of occupation- and activity-based health management and maintenance interventions for community-dwelling older adults. Am J Occup Ther. 2012;66:277–283. doi.org/10.5014/ajot.2012.00332

# OT-Based Lifestyle Redesign® for Chronic Pain

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- OT outpatient intervention; focus on healthy self-care routines/habits to prevent & manage chronic conditions.
- Through RCTs (Well Elderly Studies), Lifestyle Redesign® shown to reduce health risks and health care costs.
- Education, occupational self-analysis, problem solving, motivation building, and implementation of behaviors.
- Most common diagnoses were lumbago, myalgia (including fibromyalgia), and complex regional pain syndrome.

# OT-Based Lifestyle Redesign® for Chronic Pain

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- Canadian Occupational Performance Measure (COPM); perceived performance and satisfaction over time; self-identify areas of occupational deficit.
- Performance and satisfaction scores = 1 to 10; higher scores indicate better perceived performance and satisfaction.
- Change between initial and subsequent scores of 2 or more points is considered clinically significant.
- Pain Self-Efficacy Questionnaire (PSEQ) to track pain self-efficacy effect.
- Means of COPM performance, satisfaction measures increased significantly (by 2.02 and 2.78 points, respectively); Both COPM measures showed  $p < .001$ , strong significance in score changes.
- PSEQ average total scores increased by 4.46 points, which was significant ( $p = .0030$ ); demonstrated an improvement in the patient's perceived ability to engage in *functional activity despite pain*.

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## **Interdisciplinary Pain Management Including OT**



# Individual Program-Specific Outcomes Featuring OT

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- 3-week outpatient interdisciplinary program for chronic pain.
- Main treatment elements: physical therapy, ***occupational therapy***, cognitive behavioral therapy (CBT), and medication management.
- OT focus: moderation, time management, and activity modification.
- Average COPM-PER (performance) scores increased from 3.4 to 7.5.  
Average COPM-SAT (satisfaction) scores increased from 2.4 to 7.5.

Kurklinsky S, Perez RB, Lacayo ER, Sletten CD. The Efficacy of Interdisciplinary Rehabilitation for Improving Function in People with Chronic Pain. Pain Res Treat. 2016;2016:7217684. doi:10.1155/2016/7217684

# Veterans Administration System Success With OT

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- Past 20 years, dramatic decrease interdisciplinary pain clinics in U.S. versus VA.
- Outcomes: pain intensity, pain interference, pain catastrophizing, and sleep.
- 931 patients in 7 selected VA programs; 84.1% full treatment completion rate.
- All programs showed significant improvements: pain catastrophizing scale, insomnia severity index, pain outcome questionnaire; medium to large effect.
- OT part of majority of programs (6/7), providing general OT as well as mental health focused OT and mindfulness instruction.

Murphy JL, Palyo SA, Schmidt ZS, et al. The Resurrection of Interdisciplinary Pain Rehabilitation: Outcomes Across a Veterans Affairs Collaborative. Pain Med. 2021;22(2):430-443. doi:10.1093/pm/pnaa417

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## **OT in Primary Care and Applications to Pain Management**

# Occupational Therapy Interventions in Primary Care

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- In a primary care setting, occupational therapy practitioners (occupational therapists and occupational therapy assistants):
  - Identify internal/external barriers, habitual daily activities for optimal health.
  - Improve self-management, independence with ADLs that affect health and adherence to medical instruction.
  - Provide immediate assistance to address issues that typically would require a referral to another provider or outside clinic.
  - Increase access to care, cost effectiveness and immediately address patient needs in house.

# Occupational Therapy Interventions in Primary Care

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- Occupational therapy practitioners receive training in mental and behavioral health; CBT, ACT, Motivational Interviewing, behavioral approaches, social-emotional learning, etc.; focus on roles, habits, and routines.
- ***Integrating behavioral health into primary care is cost effective and critical to address frequently co-occurring medical and behavioral health issues.***

Dahl-Popolizio, S., Rogers, O., Muir, S. L., Carroll, J., Manson, L. Interprofessional primary care: The value of occupational therapy. The Open Journal of Occupational Therapy. 2017;5(3). Doi:10.15453/2168-6408.1363

# Occupational Therapy Interventions in Primary Care

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- Assessment and re-training of skills and activities via occupation-based methods.
- Educate on symptom and health condition management (including medications).
  - (e.g. assess and address readiness for change via behavioral health techniques)
- Adapt activities and assistive technology.
- Adapt the social and physical environment, cognition included.
  - (e.g. “non-compliance” often is affected by these factors, which OT can address)

# Occupational Therapy Interventions in Primary Care

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- Support caregivers and family.
- Lifestyle coaching for 'healthy lifestyle choices' in daily routines, including the balance between activity, rest and sleep, diet modification and physical activity.
  - (e.g. addressing roles and responsibilities to fit in time for self-care/management)
- Promoting social inclusion/community engagement, especially if at risk of isolation.

# Support for OT & Mental/Behavioral Health, Pain Treatment

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- Substance Abuse and Mental Health Services Administration includes occupational therapy in the mental and behavioral health workforce.
- Comprehensive Addiction and Recovery Act of 2016 and the SUPPORT for Patients and Communities Act of 2018 recognize occupational therapy's distinct value in pain management in direct response to the opioid crisis.
- Nonpharmacological behavioral interventions as first strategy to address lifestyle-sensitive health issues; occupational therapy practitioners can provide!

Jordan, K. Occupational therapy in primary care: Positioned and prepared to be a vital part of the team. Am J Occup Ther. 2019;73: 7305170010. doi:10.5014/ajot.2019.735002-0ddddddegh]



# **Perceived Barriers to Integration OT Services in Primary Care**

- Majority OT practitioners have specialized positions in mental health/rehabilitative settings versus use of broad scope of practice, due to reimbursement guidelines and demands of practice settings.
- Narrowed focus has resulted in a lack of understanding by the medical community of full scope of practice and qualifications for various clinical services.

Dahl-Popolizio, S., Rogers, O., Muir, S. L., Carroll, J., Manson, L. Interprofessional primary care: The value of occupational therapy. The Open Journal of Occupational Therapy. 2017;5(3). Doi:10.15453/2168-6408.1363

# Physicians' Perceptions of OT Role in Primary Care

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- Physicians consider that occupational therapists can meet the needs of diverse primary care clients.
- Benefits of OT integration include improved clients' functional status, and timely access to required care.
- The main barriers to integration are lack of funding, space and knowledge of the occupational therapist's role.
- Solutions: promoting and clarifying the role of occupational therapists in primary care and developing effective integration models.

Locas, V., Préfontaine, C., Veillette, N., Vachon, B. Integration of occupational therapists into family medicine groups: Physicians' perspectives. Br J Occup Ther. 2020;83(7):458–468. doi:10.1177/0308022619883481

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## Case Study: Mr. H

# Mr. H: Persistent Pain in Clinic Setting

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- Bipolar I
- Anxiety
- Depression
- PTSD (inpatient psych admission early 20's)
- Insomnia
- Chronic Pain Syndrome
- Lumbar Fusion (approximately 9 months ago)
- Obesity
- Recently Diagnosed Conversion Disorder

# Mr. H: Persistent Pain in Clinic Setting

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## ■ Occupational Profile:

- Father left at age 5; verbally and physically abusive step-father
- Married with 4 y.o., 3 y.o. and baby on the way
- At one time, working full time during the day, assisting to care for young children at night
- Reported spouse “gets angry easily” with difficulties with communication, lack of sex and intimacy
- Now unemployed post-surgery after working construction
- Describes self as “an empath.”

## ■ Other occupational details:

- Severe reduction in daily activities due to back pain and fear of post-surgical spinal precautions but attempts to “push through” (with onset of “right leg gives out.”).

# Mr. H: Persistent Pain in Clinic Setting

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- **Over arching themes:** cultivating safety in all aspects of daily life; fostering increased self-management; assertive communication.
- Providing pain neurophysiology in the context of bipolar, PTSD, ACEs (childhood trauma), emotional aspects/brain areas involved; integrated brief Motivational Interviewing and ACT.

# Mr. H: Persistent Pain in Clinic Setting

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- **Occupational areas of focus:**

- ✓ Pacing/graded exposure of mobility and daily activity  
(including trials of bodyweight deadlift; 2# squats due to fear with spinal precautions;  
goal for loading for work tasks)
- ✓ Therapeutic exercise self-management (nerve gliders/tensioners) → yoga
- ✓ Sleep hygiene (already using relaxation; not implementing other techniques)
- ✓ Increased physical participation with children/family (e.g. family dance parties)

# Mr. H: Persistent Pain in Clinic Setting

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## ■ Occupational areas of focus:

- ✓ Improved medication management (e.g. use of morning/evening pill organizers)
- ✓ Improved sex/intimacy with spouse  
(e.g. initial touch/kissing versus intercourse; reducing pressure on either)
- ✓ Increased daily leisure activities/mindfulness for stress management (e.g. coloring book)
- ✓ Cultivating improved self-compassion/positive-self talk  
(theme: emasculation)



## In Summary...

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- OT's scope encompasses all aspects of the Biopsychosocial Model of Pain, emphasizing person-centered pain care and occupational performance.
- OT is the ONE profession that emphasizes increased occupational independence/satisfaction and use of occupation as a treatment modality.
- Occupational therapy emphasizes patient self-management of health behaviors, as well as mental and behavioral health, and is suited for primary care intervention.
- Patient referral is warranted if identified barriers to participation in valued daily activities, difficulty with adherence to recommended health behaviors, or presents with mental/behavioral health deficits.

# Questions?

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