

opioids; patients themselves are also invited to participate in the training. The next phase of this project was to implement OEND training to other clinical settings within a major medical center. The focused clinical settings included were substance use disorder programs both residential and outpatient settings, emergency room department, and an interventional pain clinic. This presentation will discuss the process of initiating and implementation of OEND training programs within a large, Midwestern tertiary care center.

### 1C Amplified Pain Syndromes in Children: When It Hurts Too Much

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Amplified pain syndromes encompass a wide spectrum of musculoskeletal pain disorders that includes pediatric fibromyalgia, localized and diffuse amplified pain, and complex regional pain syndrome. Amplified pain can severely affect physical function, socialization, daily activities and quality of life in children and adolescents. This negative effect on quality of life can lead to prolonged disability and a profound effect on their behavioral and cognitive health. Because it is important that children experiencing this condition begin to use their body in a normal way, treatment and management is aimed at breaking the abnormal pain reflex and returning the child to normal functional activities especially school, sports and social activities. There are still many unanswered questions about amplified pain syndromes, including its cause, and diagnosis, therefore, treatment can be challenging. We will discuss etiology, recognition and evaluation of this problematic disorder as well as share our experience and outcomes at The Center for Amplified Musculoskeletal Pain Syndrome at The Children's Hospital of Philadelphia using a non-medication, function-based approach to treatment that concentrates on returning children and adolescents to full function through exercise and psychological support.

### 1D Practice Stories Inspired a Multidimensional Comfort Model for Pain Management, Clinical Practice, and Research

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#### PROBLEM STATEMENT

Pain is a global issue affecting an estimated 20% of the world population (Goldberg & McGee, 2011). The effectiveness of traditional pain management has come into question for many reasons (e.g. underassessment and treatment of pain, opioid crisis, chronic pain crisis). However, every day in healthcare systems all over the world, healthcare professionals discuss practice stories that generate hunches or theories related to patient's pain and comfort. How can practice stories be used to advance cultures of quality and safety and improve patient's comfort? Approach  
Intentional analysis of stories from practice about pain and discomfort resulted in the proposed theoretical model. Delineated from these practice stories are recurring patterns and themes used to propose a central phenomenon— dimensions of comfort, and relationships between comfort, pain, internal, and external predictors.

#### RESULTS

The Nichols-Nelsons' Theoretical Model of Comfort (NNTMC) consist of seven dimension of comfort that can be impacted by both internal and external predictors and will guide clinical practice, interventions, and research. This model also proposes a paradigm shift from pain to comfort where the assessment and analysis of the clinician-patient relationship is central to pain management; focused on the lived pain experience. Also delineated from the practice stories was the need for a physiology of comfort.

#### DISCUSSION

Practice stories delineate patterns in the lived pain experience that can broaden health care professionals' perspective of care needed in the moment. NNTMC proposes to study comfort as a process, an outcome, and a state of being: a mental and physical state for the patient and the embodiment of comfort by the clinician. Pain Management guided by NNTMC will focus on comfort, function, and safety and the clinician-patient relationship. Goldberg, D. S., & McGee, S. J. (2011). Pain as a global

public health priority. BMC Public Health, 11(1). doi:10.1186/1471-2458-11-770.

### 1E.1. Influence of Biomedical Risk Factors on Chronic Low Back Pain among Women

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#### PURPOSE

Nurses and nurse practitioners are highly involved in managing patients with chronic low back pain (CLBP). Management remains challenging with persistent biomedical risk factors (e.g. high opioid use, Body Mass Index [BMI], chronic widespread pain). Due to pervasive pain care disparities among women, this quantitative pilot study evaluated biomedical risk factors among adult females with CLBP. Findings can assist in targeting risk factors to help address known undertreatment of pain in women.

#### METHODS

This IRB-approved, descriptive, and cross-sectional study was conducted in a pain center to identify significant associations of relevant biomedical factors with pain/pain-related variables. Self-report questionnaires were gathered for 50 females with CLBP; data were analyzed using SPSS 22.

#### RESULTS

Participant mean age was 50; 54% were Black, 34% white, with 10% Hispanics. Average CLBP duration was 11 years, pain intensity was 7.86/10, and number of pain sites (other than low back) was 3.64. Participants used a mean of 58.67 morphine milligram equivalent opioids/day. Average BMI was 32.02. Using Pearson Correlation, amount of opioid use was associated with duration of CLBP ( $r=.341, p=.018$ ). BMI was correlated with pain intensity ( $r=.295, p=.038$ ) and sleep ( $r=.424, p=.002$ ). Number of pain sites was found to have several correlates so multiple regression was conducted to evaluate its predictors after controlling for age, ethnicity, and race. Significant regression equation was found ( $p=.000$ ) with adjusted  $R^2=.435$ . Predictors were age ( $B=-2.838, p=.007$ ), total number of medical conditions ( $B=2.732, p=.009$ ), total number of pain treatments used ( $B=2.269, p=.029$ ), and physical function ( $B=-2.079, p=.044$ ).

#### CONCLUSION

Unhealthy, modifiable risk factors like high opioid use and BMI are necessary targets for healthcare providers to address toward improving pain management particularly among women. Those with other co-existing pain sites are vulnerable. Further research is recommended to address pain care disparities and minimize undertreatment of complex conditions like CLBP.

### 1E.2. Use of Outpatient Lidocaine Infusions with Complex Chronic Pain Conditions: Successes and Issues Addressed

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This presentation would include a brief overview of lidocaine mechanism of action and pharmacokinetics and an outline of University of Rochester Medical Center approved protocol for Outpatient Lidocaine Infusions.

#### AIM OF INVESTIGATION

To evaluate efficacy of outpatient lidocaine infusions in reducing pain intensity, reducing pain medication use and improving function for complex neuropathic pain conditions.

#### METHODS

Retrospective review of all patients who have undergone outpatient lidocaine infusions from 2013-1/2018 (62 patients; > 280 encounters) at the Pain Treatment Center. Aggregate data reported on gender, age, pain diagnosis, medications (opioid and adjuvants) and changes in dosing, lidocaine infusion dosing, frequency of lidocaine infusions (ranging from Q4-Q24 weeks), functional assessment, pain reduction, efficacy timeframe, adverse events and reasons for discontinuing treatment.

#### RESULTS

Analysis is continuing from recent data obtained. Serial infusions have benefit with various outcome improvements (demonstrated reduction in pain and use of some medications) for some of patients. Conclusions will be outlined once all data reviewed and analyzed. This retrospective review

is supported by Department of Anesthesiology, Pain Services, University of Rochester Medical Center.

### 1E.3. Risk for Overeating to Cope with Pain among Obese Adults with Chronic Pain



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#### INTRODUCTION

Obesity and chronic pain are related (Zdziarski, Wasser, & Vincent, 2015). Pain intensity and pain-related disability increase as body mass index (BMI) increases (Fowler-Brown et al., 2013; Messier et al., 2013). The relationship between obesity and pain is unclear; a potential contributor may be overeating to soothe discomfort (Janke & Kozak, 2012). Co-occurring pain and obesity is complex; research is needed for clinicians to address both simultaneously.

#### METHOD

Adults with a self-reported pain condition were recruited from physicians' offices to complete surveys. An author-created item asked whether participants eat less, eat more to feel better, or do not change eating habits when in pain. Participants provided height and weight from which BMI was calculated. Chi-square analyses were conducted to compute relative risk ratios.

#### RESULTS/IMPLICATIONS

In total, 233 participant data were analyzed. Adults classified as obese were three times more likely to report increased eating as compared to adults with normal weight (RR = 3.75, 95% CI = 0.98, 11.00, p 0.05). When comparing adults with obesity versus overweight, obese adults had a 19% greater risk of reporting overeating when in pain (RR=1.19, 95%CI= 0.55, 2.55, p <0.05). Despite large confidence intervals, this study supports that adults with chronic pain and obesity may overeat in response to pain which could contribute to obese status and further exacerbate pain symptoms. Clinicians should inform clients of this risk and recommend dietary self-management techniques when indicated.

### 1F A Taste of MI: Motivational Interviewing and Brief Action Planning for Pain Management Nurses



Patricia Bruckenthal PhD, APRN-BC, FAAN. *Stony Brook University School of Nursing*

Patients with chronic pain often engage in unhealthy behaviors that contribute to poor health outcomes. Chronic pain and associated symptoms can be improved by active patient involvement. Nurses have the opportunity to raise patient awareness of health risks through motivational interviewing and brief treatment plans. This session will introduce motivational interviewing and brief action planning and allow a brief opportunity to practice skills necessary for delivery in the context of comprehensive pain management.

#### OBJECTIVES

Describe the foundational components of Motivational Interviewing. Discuss the components of Brief Action Planning. Apply Motivational Interviewing Skills in a Pain Management Framework.

### 2A Overdose Education and Naloxone Distribution Part 2: Data from Attendees of a Pain Rehabilitation Program



Connie A. Luedtke MA, RN-BC, Michele M. Evans APRN, CNS, Deborah A. Delgado DNP, MS, RN, Danielle N. Carlson MS, APRN, CNS. *Mayo Clinic*

This presentation is intended to be the second part of two presentations on the development of an Overdose Education and Naloxone Distribution (OEND) training program within an interdisciplinary pain rehabilitation program. This presentation will focus on quality data that was used to evaluate the development of the OEND program for friends/family members. The Mayo Clinic Pain Rehabilitation Center (PRC) is based on a Cognitive-behavioral approach to improve functioning and quality of life and to decrease dependence on healthcare services. Patients are tapered off of all pain related medications and practice a wide variety of pain coping strategies. There are known risks of patients returning to medication use during times of pain flares, even though multiple steps are put in

place (destroying pain medications, establishing relapse prevention plans, contacting previous prescribers). In recognition of the opioid epidemic in the USA, the OEND training provided in Family Group helps individuals increase the likelihood that they will administer naloxone to save another person's life in the event they encounter anyone who has overdosed on opioids. Pilot data revealed that of 69% of family/friends completed OEND training with 2.5% reporting a level of concern that their patient was likely/very likely to overdose (p = .000); 8% expressed mild worry about overdose and 3.5% expressed that they were worried/extremely worried about overdose (p = .000) Confidence levels of "knowing what to do in case of opioid overdose" and in their "ability to administer naloxone" were measured, demonstrating p = .000 level change pre to post training for both items. After training Naloxone kits are given out via prescription. Next steps are to proceed to a full, IRB study of the impact of training on PRC patients and those who participate in the training.

### 2B Making "Scents" of Aromatherapy and Use of Essential Oils: Journey to Implementation



Andrea Lee RN, CCA, LAC, Dipl.Ac. *Nationwide Children's Hospital*  
Lynn M. Anson RN-BC. *Children's Mercy Hospital*

#### AIM

Patients and families are requesting aromatherapy and use of essential oils as non-pharmacologic options for comfort management. Not currently regulated by the FDA, it is imperative for institutions to establish policies and procedures to ensure safe use.

#### METHODS

Two Children's hospitals implemented aromatherapy/essential oils programs and will share their journey. Hospital policy development is necessary to ensure the best clinical evidence is placed into practice. Staff need to have specialized training on the basic knowledge of essential oils and their approved indications for each of the specific oils as well as contraindications for specific patient populations. This presentation will share important information that healthcare providers need to know for safe use of aromatherapy in the medical setting. There are a variety of methods used to deliver aromatherapy however, some delivery modes may not be safe in the healthcare setting. Safe options for delivering aromatherapy will be reviewed. The development of patient and family education on the safe use of aromatherapy is essential to ensure safety. All treatment options for pain management must be documented for use and patient outcomes. The teams will share their journey with aromatherapy documentation and how to use this information to help with looking at quality improvement with use and outcomes.

#### RESULTS

Aromatherapy programs can be successfully implemented in a hospital setting however, it is essential to ensure proper education and procedures are put into place to safeguard patient and staff safety. This session will share the implementation of aromatherapy programs at 2 different institutions.

#### CONCLUSION

Aromatherapy programs can be successfully implement in a hospital setting however, in doing so healthcare organizations need to monitor safe use and help with publishing data for others to use.

### 2C Using a Pain Tracking App in an Adult Oncology Pain Clinic



Kathy Castille Aliffi DNP, APRN-BC, FNP-C. *Cancer Treatment Centers of America; Southeastern Regional Medical Center*

#### AIM OF INVESTIGATION

To determine if adult patients of an oncology pain clinic who self-report high pain scores (>4 on pain numeric rating scale) that use a smartphone pain tracking application (app) have improved pain and self-efficacy scores in 60 days compared to the baseline.

#### METHODS

This was an IRB approved study to recruit patients who met inclusion criteria at their usual follow-up appointment. A self-administered pain self-efficacy questionnaire (PSEQ) was completed after consenting. The