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# Mind and Body Training to Improve Functioning and Coping With Chronic Pain: A Pilot Study

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The mission of the Journal of Patient-Centered Research and Reviews (JPCRR) is to further the ongoing quest for new knowledge by providing a medium for the communication of clinical research, with the purpose of improving the quality of human health, the care of the individual patient, and the care of populations.

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used, including variants of delirium, altered mental status, acute confusional state, acute brain syndrome, acute brain failure, metabolic encephalopathy, predict, predictive, prediction, models, modeling, scores, scoring, tests, testing, rules, index and indices. The bibliographies of included studies were examined, and no additional articles were referenced.

**Results:** To appropriately extract data from the 12 studies meeting inclusion criteria, the following parameters were used: study description, study population, delirium assessment method, incidence of delirium, and risk factors for delirium. Quality for cohort studies was assessed using “Newcastle-Ottawa Quality Assessment Scale” ranging from 1 to 9 (1 = poor quality, 9 = high quality). Overall incidence of delirium in the studies ranged from 4% to 26%. Most common risk factors for delirium were dementia, decreased functional status, blood urea nitrogen to creatinine ratio, infection and severe illness. Other variables less common were alcohol, malignancy, history of delirium, older age, medications, physical restraints, malnutrition, admitted from other than home and an iatrogenic event. The quality of studies ranged from 4 to 8.

**Conclusion:** This systematic review summarizes the medical literature on risk prediction models for delirium in hospitalized older patients. We will use this information to develop an EHR-generated delirium risk prediction model to be used by the “Hospital Elder Life Program” to reduce delirium incidence.

### **Mind and Body Training to Improve Functioning and Coping With Chronic Pain: A Pilot Study**

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**Background:** Patients with chronic pain are often crippled by psychological distress, depression and fear. These patients also can develop altered pain perception, with enhanced brain activity in pain-responsive regions and those associated with anxiety/depression. Exercise and meditation can impact pain-reducing brain areas and positively influence pain characteristics.

**Purpose:** To alter pain center activity by reducing the activation of the higher brain and deactivation of the lower brain with somatocognitive and meditative practices, with secondary aim of reducing anxiety/depression and improve overall quality of life.

**Methods:** We conducted a pilot study on mentally competent adult women with stable chronic pain who were resistant to conventional therapies. Our intervention consisted of an initial 8-hour session at which baseline assessments were completed with introduction to mind/body tools (i.e. deep meditation, breath work, etc.). Baseline assessments also included self-assessment using pain rating surveys, the Zung self-rating anxiety and depression scales, the World Health Organization

Quality of Life-BREF instrument, and the Conner-Davidson Resilience Scale. Following the initial session, 1.5-hour-long meetings were held weekly for 8 weeks, followed by biweekly meetings for 8 weeks, then monthly. Mind/body tools were systematically taught and reinforced during meetings. Patients kept a journal detailing their practice. Pain rating surveys were filled out monthly. All other measures were filled out at 3 and 6 months.

**Results:** Participating women (N=5) had mean age of 43.2 years and mean body mass index of 35.8 kg/m<sup>2</sup>. Mean long-acting narcotic (LAN) was 260, 221.6 and 248.2 mg/day at baseline, 3- and 6-month assessments, respectively. Patients did not significantly decrease use of LAN. Additionally, no statistical difference was identified in a patient’s time in pain or pain right now, resilience, anxiety and depression. However, overall quality of life improved significantly at 6-month follow-up (50.0 vs 25.0, P=0.016). Following 6-month assessment, patients were highly satisfied with their experience. All (100%) strongly agreed that the instructors responded well to questions and established good relationships with participants.

**Conclusion:** Intervention resulted in statistically nonsignificant decreased LAN use and reduced anxiety and depression scales, as well as statistically significant improvement in overall quality of life. Data from these patients will continue to be collected at 6-month intervals to see if there are lasting effects or further improvements.

### **Quality Improvement of Procedural Services in Family Medicine Residency Clinics**

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**Background:** Performing common procedures in our family medicine residency clinics is often a difficult and inefficient process. A 2008 Society of Teachers of Family Medicine consensus statement on procedural training found higher job satisfaction and better financial compensation for family practitioners who performed procedures. Patient satisfaction is likely increased when minor procedures are able to be performed by their primary clinician. This would suggest a disconnect between the known benefits of providing procedural services and the ability of our residency clinics to provide those services in an efficient manner.

**Purpose:** To assess clinician and staff comfort with performance of common family medicine procedures and implement an intervention to improve the efficiency of procedure performance in the clinic setting.

**Methods:** Phase 1: Preintervention survey was distributed to physicians, residents and staff at Aurora Health Care’s family medicine residency clinics. Survey evaluated comfort level of providers in performing common procedures and identifying proper equipment needed to perform procedures. Data was compiled in Microsoft Excel; statistical analysis was performed using ordinal logistic and binary regression. Phase