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

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Recommended Citation

Published quarterly by Midwest-based health system Advocate Aurora Health and indexed in PubMed Central, the Journal of Patient-Centered Research and Reviews (JPCRR) is an open access, peer-reviewed medical journal focused on disseminating scholarly works devoted to improving patient-centered care practices, health outcomes, and the patient experience.
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/m². 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