

PAIN AND ITS MANAGEMENT: STRATEGIES AND OUTCOMES IN OLDER ADULTS WITH OR AT RISK FOR KNEE OSTEOARTHRITIS

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Knee osteoarthritis (KOA) is a leading cause of mobility disability that is characterized by chronic pain among older adults. Non-Hispanic Blacks (NHBs) suffer disproportionately from non-Hispanic Whites (NHWs), reporting higher pain intensity and disability. It is unclear how these differences in symptomatology translate into different patterns of utilization for self-management (SM) of pain, and if such patterns are associated with underlying biological pain mechanisms. This multisite observational study examined (1) use of self-management strategies among older NHB and NHW adults with/at risk for KOA and (2) associations among self-management strategies, clinical and experimental pain. After approval from institutional IRBs, NHB and NHW older adults (N= 202) with knee pain completed the McGill Pain Questionnaire-Short Form, questions on treatment strategies (e.g., massage, ice, heat, medications), and quantitative sensory testing. Covariates included study site and education. On average, participants reported using 2 ± 1.65 SM strategies, with 79% endorsing at least one SM strategy. Analysis of covariance revealed that clinical pain differed by race/ethnicity and use of SM and/or medical treatments ($p < 0.01$). SM use did not differ by race/ethnicity, $p = 0.15$, but did differ significantly by gender, $p < 0.05$. Multiple linear regression demonstrated significant positive associations between SM and heat pain sensitivity for both NHBs and NHWs, ($p < 0.05$). SM is an important component of OA management for NHBs and NHWs. Our study is one of the first to show that SM use is significantly associated with pain mechanisms. Improved understanding will facilitate better mechanism-targeted pain management.

PAIN-ASSOCIATED CLUSTERS AMONG NURSING HOME RESIDENTS

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Chronic pain is common in older adults, particularly among nursing home residents (NHR). Internationally, the reported pain prevalence among NHR ranges from 3.7% to 79.5%. At least one in two German NHR are diagnosed with pain. Unrelieved chronic pain is associated with reduced physical functioning and psychological parameters. Given the high prevalence of pain among NHR, we hypothesized that there were likely pain-associated clusters in our target group. Clustering is an opportunity to identify differences in pain management and may enable better targeted health-service delivery for professionals. There are no available data regarding pain-associated clusters (sub-groups of NHR) based on different items measuring pain. This study was performed

using baseline data, and was part of a cluster-randomized controlled trial conducted in 12 nursing homes in Berlin. We assessed pain using the German Brief Pain Inventory (BPI-NHR) among 137 NHR (mean age, 83.33 years) capable of self-report. We performed hierarchical agglomerative cluster analysis to generate three clusters (naming is based on the mean value of each BPI-NHR item in each cluster): pain-relieved (46.72 %), pain-restricted (22.63 %), and severe pain (30.66 %). Body-Mass-Index ($F(2,129) = 4.274$, $P = 0.016$), Barthel-Index ($F(2,133) = 3.246$, $P = 0.042$), and appropriateness of pain medication ($F(2,119) = 12.007$, $P = 0.000$) differed between clusters. Parameters associated with an increased or decreased risk of being in a pain-diagnosed cluster will be discussed. The observed need for clinical interventions aiming at shifting from pain-diagnosed clusters to pain-relieved status will be reflected.

PATIENT-REPORTED FACTORS ALLEVIATING PAIN AMONG PERSONS WITH CANCER

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Pain impacts wellbeing and is among the most common symptoms of cancer. Factors that decrease pain severity have been understudied despite their importance for high-quality cancer care. The study purpose was to describe pain alleviating factors and their association with type of cancer. This secondary comparative analysis included 579 participants from studies of inpatients and outpatients with cancer (mean age=58.7±12.3; 27.3% female; 85.5% White, 5.7% Black, 7.6% Other). They completed the McGill Pain Questionnaire on paper or a tablet computer. To determine factors that alleviated pain, we focused on the open-ended question: 1) What kinds of things relieve your pain? We coded text responses into six outcome categories: 1) Activity level, 2) Cognitive, 3) Environmental, 4) Medical, 5) Physical, and 6) Sedentary behavior. We counted the number of activities/factors in each category and conducted multivariable regression analysis adjusting for sociodemographic constructs. Adjusted models revealed that activity ($p=0.02$), cognition ($p<0.001$) and medication ($p<0.001$) were more often endorsed as alleviating factors among individuals living with lung cancer compared to head and neck cancer participants. Those diagnosed with lung cancer ($p=0.02$) and males ($p=0.02$) utilized significantly less physical alleviating factors than head and neck cancer individuals and females. This is the first study to examine pain-alleviating factors among individuals living with cancer. These findings contribute new information regarding activities that alleviate pain among cancer survivors. These findings could inform interventions to promote safe, personalized care designed to alleviate cancer-pain.

THE PAIN SITUATION OF OLDER HOME-CARE RECIPIENTS AND INFLUENCING FACTORS

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Chronic pain is a common symptom among older people. The international prevalence rate reaches 50% for older