

**Conclusion:** RMDs are highly prevalent and significantly affect activity limitations and participation restrictions. More effort is needed to improve care and research in this field.

### 385 HETEROGENEITY OF CLINICAL CHARACTERISTICS AND TREATMENT USE AMONG PATIENTS WITH OSTEOARTHRITIS IN PRIMARY CARE CLINICS

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**Purpose:** Although guidelines exist for the management of hip and knee osteoarthritis (OA), little is known about how treatment use may vary across health care settings, particularly in the United States (U.S.). This study compared clinical characteristics and treatment use patterns among patients with hip and knee OA in ten Family and Internal Medicine clinics in one healthcare system, which varied in patient panel size and represented both urban and rural settings.

**Methods:** Baseline data were obtained from an ongoing randomized clinical trial of Patient and Provider Interventions for Managing Osteoarthritis in Primary Care in the Duke University Healthcare System. Participants (n = 488; 21–57 per clinic) had hip and / or knee OA, were overweight, and were not meeting physical activity recommendations. Clinical characteristics included the Western Ontario and McMaster University Osteoarthritis Index (WOMAC) scale, self-reported duration of arthritis symptoms, and diagnoses of hip and / or knee OA. Self-reported OA treatment use included: current use of pain medications for OA (yes / no), ever having received physical therapy for knee / hip OA (yes / no), ever having used a knee brace (yes / no), ever having a knee joint injection (yes / no); the latter two questions were only asked for patients with diagnoses of knee OA. For all measures we computed means and standard deviations or proportions for each clinic.

**Results:** Clinical characteristics of patients varied considerably across study sites. Mean WOMAC scores ranged from 35.0 (SD = 16.1) to 44.1 (SD = 15.0) and the mean duration of arthritis symptoms ranged from 8.2 (SD = 9.3) to 13.9 (SD = 12.7) years. Most patients at each clinic had diagnoses of knee OA (90%–100%), but the proportion with hip OA diagnoses varied from 26%–68% across clinics; 23%–61% had both diagnoses. Most patients at each clinic were currently using pain medications to treat their OA (73%–88%). However, use of other treatments was lower and varied more substantially across clinics. In seven of the clinics, less than half of patients had ever received physical therapy for knee OA; proportions ranged from 25%–64% across clinics. Physical therapy for hip OA was even less common (0%–60%). Knee brace use (any type) ranged from 40%–64%, but use of braces with metal supports was much less common (0%–40%). Knee injections were reported by 43%–74% of patients.

**Conclusions:** The heterogeneity of patient characteristics across clinics in this study illustrates the importance of including multiple and diverse sites in clinical and health services trials for knee and hip OA. These data on OA treatment use across different clinics are some of the first to be reported in the U.S. and show considerable variation, particularly in the use of non-pharmacological therapies. Despite the relatively long average duration of symptoms in these patients, physical therapy use was very low in many of the clinics. This represents one important area for improvement and standardization in the practice of OA management, particularly knee OA, since physical therapy is an evidence-based and recommended treatment component.

### 386 WAITING FOR HIP REPLACEMENT: PATIENTS' EXPERIENCES OF TIME

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**Purpose:** Numbers of hip replacement procedures are on the increase globally. In the UK, over 76,000 now take place annually for patients who have been living with pain and disability associated with osteoarthritis. The time waiting for surgery is known to have an impact on pain and functional ability, and processes within healthcare systems often strive to reduce waiting times. Within the UK's National Health Service, many patients have their hip replacement well within the 18 week window stipulated by previous policies, but wait for surgery may be complicated by cancellations and delay. Although reduction in

waiting times is often heralded as a positive move in healthcare provision and the clock is seen as paramount in service planning, it is not known how patients awaiting view and experience passage of time in the lead-up to their surgery. This information has the potential to inform the ways in which decisions are made about timing of surgery and information exchange around delay or cancellation. This may influence satisfaction and outcome after hip replacement. We therefore conducted a study to analyse how patients with osteoarthritis experience and conceptualise time as they wait for surgery.

**Methods:** A longitudinal, qualitative interview study was conducted with patients on a waiting list for total hip replacement. 111 patients were approached to take part in in-depth interviews. Twenty-four patients consented to participation and data saturation was achieved (13 men, 11 women, 52–82 years). Participants were interviewed at four time-points: before surgery, two-four weeks, six months and 12 months afterwards. Additional interviews were conducted when patients experienced delay to their care pathway. Using a topic guide to aid questions, an experienced qualitative researcher (EJ) interviewed participants about pain, disability, views about surgery and pathways through healthcare. Interviews were audio-recorded, transcribed, anonymised and analysed using inductive thematic analysis with double-coding by members of the research team to ensure robust analysis and interpretation. Findings presented here relate to the first two time-points.

**Results:** Escalating pain and deterioration in function impacted on patients' experiences of time during their wait for hip replacement. Participants made essential alterations to how they filled their days and they experienced disruption to the passage of time in their lives. Tasks took more time to accomplish and as participants had reduced activities available to them, they reported a sense of time slowing down. Participants' lives were increasingly punctuated by activities relating to managing their condition (e.g. regular use of pain medication) and surgery (e.g. essential preparatory tasks). A surgical date marked in the calendar became their focus. However, this date was not static: participants described how they felt that the waiting time could feel slower than time would normally pass, and the dates also shifted because of hospitals' alterations to surgery dates.

**Conclusions:** Internal factors (e.g. pain sensation, disability, constraints on how time is spent) and external factors (e.g. preparatory tasks, changes to surgery date) influenced participants' experiences of time while on the waiting list for hip replacement. However, the complexity of participants' perceptions of time during this period does not reflect the linear, monochronic concept of time used by the healthcare system and service providers. The study highlights a need to include discussion about alterations made to daily life, pain management and expectations of outcome in decisions to undergo hip replacement.

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### 387 CURRENT EVIDENCE FOR CLINICAL PHENOTYPES IN KNEE OSTEOARTHRITIS: A SYSTEMATIC REVIEW

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**Purpose:** Heterogeneity within the population of knee osteoarthritis (KOA) patients impedes progress in our understanding of the disease and development of effective interventions. It has been suggested that distinct phenotypes, or patient subgroups characterised by distinctive features, are present within the wider KOA population. The purpose of this systematic review was to identify current evidence for the existence of distinct clinical phenotypes in KOA.

**Methods:** Literature databases were systematically searched for clinical studies in humans with knee osteoarthritis aimed at subgroup or phenotype identification. Study quality was scored using a checklist for observational studies according to STROBE guidelines.

**Results:** 19 full-text original papers were included in the review from an initial search result of 625 abstracts. These studies addressed the research areas of genetics; anatomy and medical imaging; biochemistry; biomechanics; and epidemiology. Evidence was found for the existence of an inflammatory phenotype linked to biomarkers such