Standardized prevalence is 2.0% (men) and 2.5% (women) and 4.8% (men) and 6.6% (women) for hip and knee symptomatic OA respectively.

Conclusion: This survey is the first estimation of the prevalence of symptomatic hip and knee OA in France, increasing knowledge about population-based estimates of this condition in Europe. The use of a screening questionnaire validated during pilot studies, the application of multiple imputation to account for missing data, and the correction method to account for the sensitivity error of the screening questionnaire warrant the accuracy of the results. This study also confirms the feasibility of using a screening questionnaire in two-phase population based surveys in this disease.

### 349 MANAGEMENT OF OSTEOARTHRITIS IN SECONDARY CARE: HOW DECISIONS ARE MADE ABOUT SURGERY

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Purpose: Total joint replacement (TJR) surgery for hip or knee osteoarthritis is among the most common elective surgical procedures. TJR is often seen as the ultimate treatment modality for advanced OA but there is inequity in provision of surgery. Decisions that lead up to surgery may contribute to these inequities. The model of shared decision-making between patients and clinicians is advocated as an ideal in clinical guidance about OA management, but it is unclear whether decision-making about surgery reflects this. This study examined how decisions are made about TJR in orthopaedic consultations.

Methods: The study was a qualitative research design comprising semi-structured interviews and observations. Participants were recruited from three hospital sites. Seven clinicians involved in decision-making about TJR were approached to take part in the study, and six agreed to do so. Seventy-seven patients due to see these clinicians about TJR were approached to take part and 26 agreed to do so. The patients’ outpatient appointments were observed and audio-recorded. Subsequent interviews with patients and clinicians examined decisions that were made at the appointments. Data were imported into the qualitative software package, Atlas ti, and were analysed using thematic analysis.

Results: Not all patients were ‘listed’ for surgical management of their OA. Clinical and lifestyle factors were central components of the decision-making process for patients. Clinical factors included: diagnosis, symptom severity (pain and function), co-morbidities and previous treatment outcomes. Lifestyle factors were: leisure activities, work, and family life. In addition, patients saw clinicians as occupying expert roles and they deferred to clinicians’ expertise. There was evidence that patients modified their behaviour within consultations to complement that of clinicians, but disagreement about course of treatment was not always resolved in consultations. Clinicians acknowledged the complexity of decision-making and provided descriptions of their own decision-making and communication styles. Patients and clinicians were aware of the use of clinical and lifestyle factors in decision-making, but the impact of roles and communication was only described by clinicians.

Conclusion: Differences between OA patients’ and clinicians’ awareness of the importance of roles and communication in decision-making for TJR may limit the opportunity for shared decisions. This may contribute to variation in the provision of treatment for OA. Information about these differences may improve decision-making and improve equity in treatment provision.

### 350 SOCIAL DETERMINANTS ASSOCIATED WITH PAIN, PHYSICAL FUNCTION, AND STIFFNESS IN INDIVIDUALS WITH HIP OSTEOARTHRITIS

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Purpose: Pain, stiffness, and disability are important sequelae of hip osteoarthritis (OA), but few studies have examined factors associated with these outcomes. Only one study has looked at education’s relationship with these hip OA outcomes. Our study examines associations between individual and community social determinants (education, occupation, and community poverty) with pain, physical function, and stiffness in people with hip OA, while controlling for pain in another lower extremity, the knee.

Methods: A cross-sectional analysis was conducted on 2933 individuals (65% White and 35% African American [AA]) in the Johnston County OA Project who resided in 67 of the 68 Census block groups of the county. Education (< high school (HS) degree or >HS), occupation (physically demanding or not) and Census block group poverty rate (<12%, 12-25%, >25%) were used as socioeconomic (SES) measures. Covariates included age, gender, race, body mass index (BMI), knee pain, and an occupational activity scale (reporting frequency of squatting, standing, lifting, and walking). Three outcomes were investigated: pain, physical function, and stiffness as measured by the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC). Analyses were run separately for people with radiographic rOA (defined as Kellgren-Lawrence grade ≥2 in one or both hips), and symptomatic OA (sympOA) (rOA and symptoms =pain, aching or stiffness on most days– in the same hip joint, either one or both hips). Race was examined for interactions with education, occupation, and community poverty; there was no evidence of effect modification, so analyses were not race-stratified. Multiple regression models were used to determine associations of each outcome and the three main variables, adjusting for covariates.

Results: 33.5% of the sample had rOA and 11.8% sympOA, all of whom had rOA. In unadjusted models for people with rOA or sympOA, single SES variables, lower education level, physically demanding occupation, and higher block group poverty rate, were all significantly (p < 0.05) associated with pain, physical function, and stiffness measured by the WOMAC. In individuals with sympOA, all variables were still associated with pain and sympOA, while controlling for sympOA (rOA and symptoms–pain, aching or stiffness on most days). In unadjusted models for people with rOA, education and occupation were significantly (p < 0.01) associated with function, [βs, 95% CIs respectively, 4.38 (2.03, 6.72), 3.33 (1.12, 5.55), 2.56 (0.07, 5.05)]. Education and occupation were significantly (p < 0.01) associated with pain [βs, 95% CI, 0.99 (0.31, 1.68), 1.05 (0.39, 1.71)]. No SES variables were significantly associated with stiffness. In individuals with sympOA, education and occupation were significantly (p < 0.01) associated with function [βs, 95% CI, 4.98 (0.88, 9.07), 5.53 (1.37, 9.68)]; occupation with pain [β, 95% CI, 1.87 (0.6, 3.14)]; and, no SES variables with stiffness. In models that included all three SES variables simultaneously, education was associated independently (p < 0.01) with function [β = 3.44, 95% CI (0.93, 5.96)] in individuals with rOA. Occupation was associated independently (p < 0.01) with pain in both rOA and sympOA [βs 95% CIs respectively, 0.81 (0.11, 1.52), 1.7 (0.34, 3.07)]. No SES variables were associated with stiffness. Throughout the analyses, knee pain and obesity (BMI ≥30) were the dominant significant covariates in contributing to WOMAC scores.

Conclusion: Our study confirms in both AA and Whites, the findings from Finland indicating education is associated with WOMAC outcomes in individuals with hip OA after adjusting for known predictors such as BMI, calendar and knee pain. When individual and community social determinants were analyzed simultaneously in models, education was associated with WOMAC function, occupation was associated with WOMAC pain, and community poverty was not associated with WOMAC outcomes in hip OA.

### 351 PRE-OPERATIVE EXPECTATION PREDICTS 12-MONTH POST-OPERATIVE OUTCOME AMONG PATIENTS UNDERGOING PRIMARY TOTAL HIP REPLACEMENT IN EUROPEAN ORTHOPAEDIC CENTRES

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Purpose: Patients’ expectations of surgery may be related to outcomes of joint replacement. The aims of this study were to: 1. Identify patient characteristics associated with pre-operative expectations of total hip replacement (THR); 2. Explore whether pre-operative expectations influence surgical outcomes 12-months post-THR.

Methods: The EUROHIP study consists of 1327 consenting patients coming to primary THR for OA across 20 European orthopaedic centres. Patients were asked about their pre-operative expectations of surgery using an