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**SAT0607** INCIDENCE AND SEVERITY OF FRAGILITY FRACTURES IN FRANCE

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**Background:** Certain fragility fractures (for example of the hip and femur) in the elderly are considered major since they are associated with increased mortality and morbidity.<sup>1</sup>

**Objectives:** To describe the characteristics of adults aged ≥50 years in France experiencing fragility fractures according to the site of fracture.

**Methods:** A postal questionnaire was sent to 15,000 individuals aged ≥50 years in order to identify and characterise subjects with a history of fragility fracture. Subjects were asked whether they had experienced a fracture in the previous 3 years and, if so, how many. Fractures were classified according to site into major (shoulder, vertebrae, pelvis, hip or femur and ≥3 ribs) or minor (other sites).<sup>1</sup>

**Results:** Of the 13,914 subjects returning the questionnaire, 425 (3%) reported ≥1 fragility fracture. The fracture history rate in the previous year was 1.4% [95%CI: 1.2–1.6]; this rate was higher in women (2.0%) than in men (0.7%) and increased with age. 147 subjects reported major fractures and 287 subjects minor fractures. Most fractures (82.4%) resulted from falling over. The most frequent major fracture sites were the humerus (10.6% of all fractures), vertebra (8.1%) and hip (7.1%). The most frequent minor fracture sites were the forearm/wrist (24.7%) and ankle (17.7%). 25 subjects reported >1 fractures and were excluded from further analyses. Subjects with a history of major fractures were older ( $p<0.01$ ) than those with minor fractures ( $72.6\pm 11.3$  vs.  $67.1\pm 10.6$  years;  $p<0.01$ ). Distribution of gender, body mass index and comorbidities did not differ between prior fracture types. Current obesity was, however, associated with a higher rate of previous fracture of the lower limb. Subjects with a history of major fractures reported a significantly greater loss in height since the age of 20 ( $p<0.01$ ) than those with a history of minor fractures ( $-3.38\pm 2.35$  vs.  $-2.75\pm 2.02$  cm). Subjects who reported lifetime corticosteroid use for ≥3 months more frequently reported major fractures than minor fractures (odds ratio: 1.90 [1.13;3.18]), as did post-menopausal women (odds ratio: 4.64[1.06;20.43]) and women using oestrogen-based hormone replacement therapy (odds ratio: 1.86 [1.06;3.29]). Parental fracture history, a history of falls, excess alcohol consumption or active smoking, and use of drugs that may increase risk of falls (antidepressants, antiepileptic drugs) were not associated with the type of fracture.

**Conclusion:** Extrapolated to the total French population, >340,000 people aged ≥50 years would be expected to experience a fragility fracture each year. One third of these fractures are major. Characteristics found to be associated with the severity of the prior fracture were older age, corticosteroid use, post-menopausal status and use of oestrogens. Limitations of the study include retrospective data collection, risk of recall bias, lack of ascertainment of fracture history and failure to capture subjects in residential care or who had died since the fracture.

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**SAT0608** THE PREVALENCE OF RHEUMATOID ARTHRITIS IN CHILE, A STUDY PERFORMED AS PART OF THE NATIONAL SURVEY HEALTH (ENS 2016-17)

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**Background:** Genetic and environmental backgrounds influence the development of rheumatoid arthritis (RA) and its frequency has regional variations. In Latin America epidemiologic data are scarce.

**Objectives:** We aimed to determine the prevalence of RA in Chile as part of the National Health Survey (ENS, Encuesta Nacional de Salud).

**Methods:** ENS was a cross-sectional household survey with a stratified multistage probability sample of 6,233 participants performed between August 2016 and March 2017. A screening instrument for RA was applied to a random sample of 3,700 subjects >30 years old.<sup>1, 2</sup> Positive screening was defined by at least one of the following: (i) 2 swollen joints for at least 4 consecutive weeks (past or present) and/or (ii) a diagnosis of arthritis in the past. Individuals with positive screening had Rheumatoid Factor, Anti-citrullinated protein antibodies, and C-reactive protein measured and clinical examination was performed by a rheumatologist. Self-report of doctor-diagnosed RA was also performed.

**Results:** The screening questionnaire was applied to 2,998 subjects. Seven hundred and thirty-eight (22.1%) had a positive screening. Among the subjects with a positive screening 493 (66%) had consulted a rheumatologist. Thirty-one subjects had RA according to the ACR/EULAR 2010 classification criteria, which corresponds to 0.6% (95%CI 0.3, 1.2). Three point three per cent reported having RA. Prevalence was higher in women and in high SES.

**Conclusion:** According to this national population-based study RA prevalence in Chile is 0.6% (0.3, 1.2). This is similar to the prevalence previously reported in developed countries, which is noteworthy given the differences in sociodemographic characteristics which exist compared to Chile. Self-reporting leads to an important overestimation of RA. Our study suggests there is a higher risk of RA in subjects with high SES in this region.

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