

# YEARS OF WORKING LIFE LOST CAUSED BY OSTEOARTHRITIS IN PORTUGAL

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## INTRODUCTION

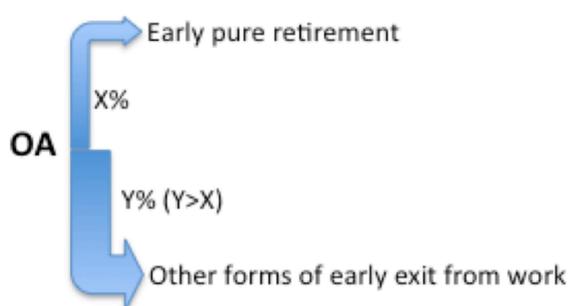
- Osteoarthritis (OA) is a highly prevalent and disabling condition, which may lead to early job withdrawal and considerable losses of working life years.
- The aim of this study was to calculate the years of working life lost (YWLL) from early exit from work associated with Osteoarthritis (OA).

## METHODS

- We used data from the population-based EpiReumaPt study (Sep2011-Dec2013).
- 10,661 inhabitants were surveyed to capture all cases of RD within a representative sample of the Portuguese population.
- We analyzed all aged 50-65 years old (yo), near the official retirement age. YWLL were determined for OA cases with premature exit from work caused by RD (self-reported) estimated as the difference between each participant's age and the respective age ("observed stock").
- The potential YWLL (PYWLL: YWLL+"expected stock" of YWLL still to occur if there is no return-to-work) was the difference between official and actual retirement ages.
- We also calculated the percentage of time in inactivity (inactivity ratio=YWLL/Active age-range[15-65yo]).
- We excluded all OA participants with concomitant inflammatory rheumatic diseases with possible impact on retirement, such as rheumatoid arthritis and spondylarthritis.
- All cases with retirement prior to onset of OA symptoms were also excluded. All results were based on weighted data.
- Multivariable models were adjusted for age, gender, NUTSII, education level, household income and other chronic diseases.

## Logistic Regression Results

	EARLY RETIREMENT		EARLY EXIT FROM WORK	
	Univariable OR (95% CI)	Multivariable OR (95% CI)	Univariable OR (95% CI)	Multivariable OR (95% CI)
<b>OSTEOARTHRITIS</b>	1.18 (0.78-1.79) NS	NA	1.78 (1.19-2.65)	1.83 (1.12-2.96)
<b>KNEE OSTEOARTHRITIS</b>	1.37 (0.90-2.08) NS	NA	2.22 (1.49-3.29)	1.96 (1.20-3.22)
<b>HIP OSTEOARTHRITIS</b>	1.25 (0.44-3.53) NS	NA	0.99 (0.33-2.98)	NA
<b>HAND OSTEOARTHRITIS</b>	0.96 (0.58-1.62) NS	NA	1.20 (0.78-1.86)	NA

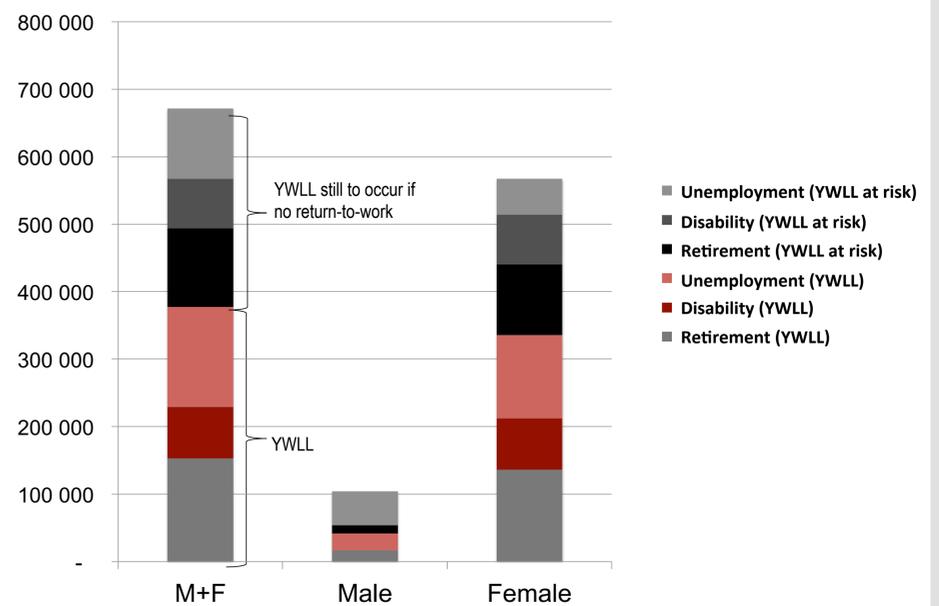


Osteoarthritis is associated with other routes of early withdrawal from paid work and less with "pure" early retirement

## RESULTS

- The estimated prevalence of OA in the Portuguese population (50-64 yo) is 29.7% (knee:18.6%; hand:12.6%; hip:3.6%).
- Among these, 61.8% were out of work versus 47.6% for those without OA ( $p=0.004$ ).
- OA is associated with early exit from work (unadjusted OR: 1.78; CI:1.19-2.65;  $p=0.005$ . Adjusted OR: 1.83; CI: 1.12-2.96;  $p=0.015$ ), but not with official early retirement (OR: 1.18; CI:0.78-1.79;  $p=0.437$ ).
- Early exit from work potentially led to 162,735 YWLL (95 per 1000 inhabitants).
- Early retirement contributed the most for these YWLL (58%; 94,432 YWLL), followed by unemployment (35%; 57,209 YWLL) and disability pensions (7%; 11,094 YWLL).
- Women accounted for 80% of these YWLL (153 per 1000 female inhabitants).
- A total of 161,621 PYWLL were estimated if early retirement is considered and 369,839 PYWLL for all forms of exit from work.
- The mean YWLL and PYWLL inactivity ratios were 16% and 30%, respectively.

## Years of Working Life Lost caused by OA



## CONCLUSIONS

- In this nationwide epidemiological study, we measured high prevalence of OA in critical ages for early retirement.
- Moreover, we found a significant association between OA and early exit from work, but not with early official retirement.
- This likely mean that while society somehow avoid official retirement due to OA, other routes of early withdrawal from paid work are taking place.
- Identification of these alternative routes and setting up interventions to reduce or discourage them is crucial for the future sustainability of social protection policies.
- We also estimated a considerable amount of working life years losses associated with OA in Portugal