

OBJECTIVES

Notwithstanding the high prevalence of osteoarthritis (OA), there is a knowledge gap of the burden on the health care system and society. This study investigated the extent of health care utilization and sick leave in patients with OA in Israel.

METHODS

A retrospective cohort study was performed in Maccabi Healthcare Services (MHS), a 2.4-million-member health plan in Israel during the years 2013-2018. Included were patients aged 18 or higher diagnosed with OA until 2018. Sick leave was defined as one or more medically certified sickness episodes during the study period. Health care utilization comprised outpatient visits, hospitalizations, and OA-related surgical and nonsurgical procedures..

RESULTS

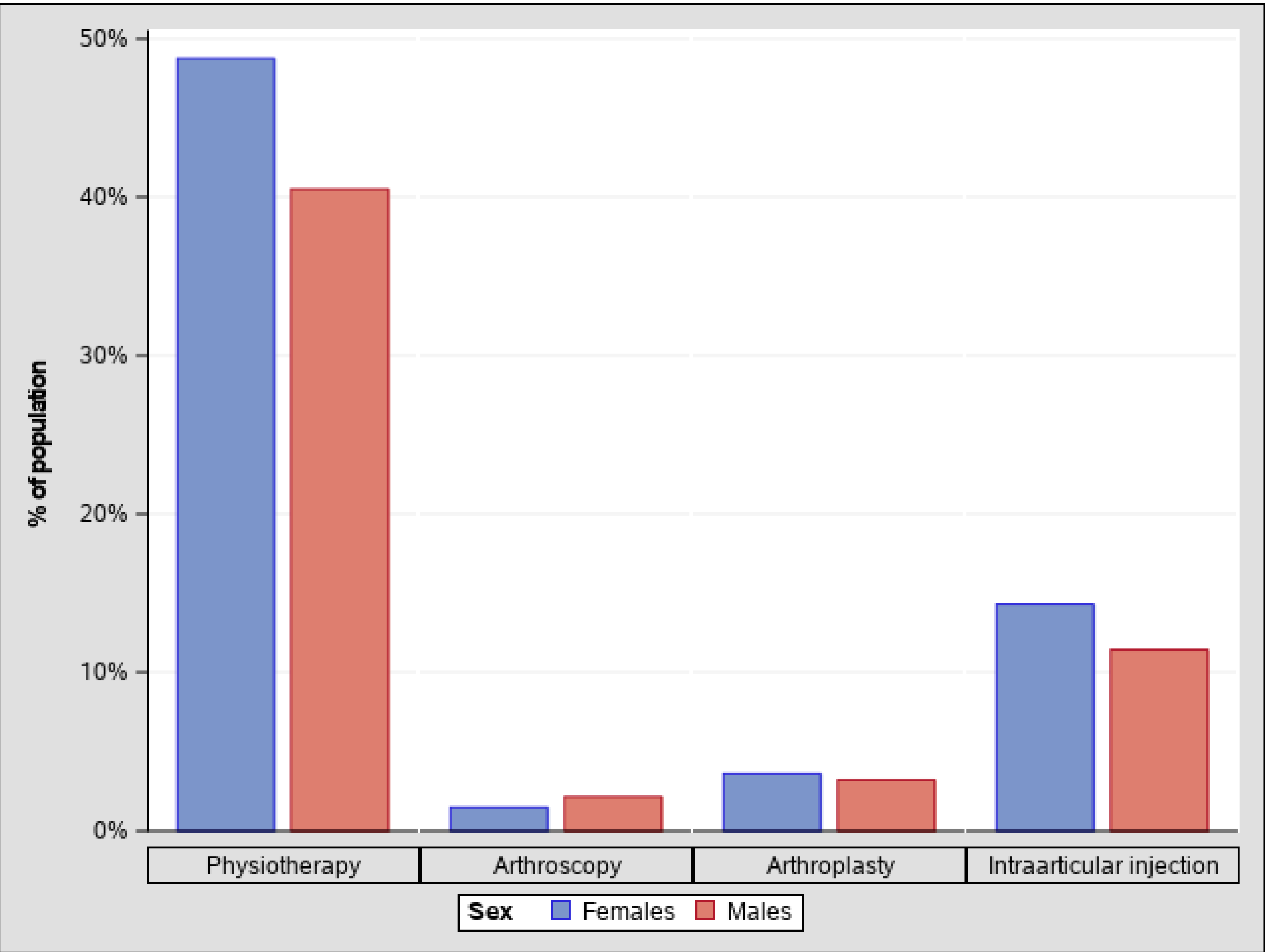
- The cohort included 180,126 MHS members, aged 58.5 years on average (±11.9 SD) and 64.3% women.
- 41.0% of OA patients had ≥1 sick leave (median, 5; interquartile range [IQR], 2-12 episodes; Table). Among OA patients of working age (less than 62 for females, 67 for males), 56.0% had at least one sick leave (median, 6; IQR, 2-13 episodes).
 - More than half of patients attended the outpatient clinic at least once during the study period: 57.3% made visits to primary care physicians (median, 38; IQR, 21-62 visits), 12.9% had rheumatologist visits (median 2; IQR, 1-4 visits), 53.4% referred to orthopedists (median, 5; IQR, 2-10 visits), and 54.1% were seen by nurses (median, 8; IQR, 4-15 visits).
 - 53.5% of patients were hospitalized at least once (median, 3; IQR, 1-10 hospitalizations) with a 3-day median length of hospital stay (IQR, 1-10 days).
 - Procedures were conducted in 57.7% of OA patients (median, 101; IQR, 49-187 procedures); a small proportion underwent arthroplasty or arthroscopy interventions (3.4% and 1.7%, respectively). In contrast, 45.8% utilized physiotherapy services (median, 17; IQR, 6-38 sessions).



Table: Healthcare resource utilization (HCRU) among OA population (2013-2018)

HCRU (2013-2018)		OA population N= 180126	Mean Age (SD), years	% Females
General practitioner visits	≥1, %	103229 (57.3%)		
	Median (IQR)	38 ,21 -62		
Rheumatologist visits	≥1, %	23252 (12.9%)		
	Median (IQR)	2 ,1 -4		
Orthopedic visits	≥1, %	96215 (53.4%)		
	Median (IQR)	5 ,2 -10		
Other physician visits	≥1, %	103239 (57.3%)		
	Median (IQR)	28 ,13 -51		
Nurse visits	≥1, %	97513 (54.1%)		
	Median (IQR)	8 ,4 -15		
ER visits	≥1, %	24596 (13.6%)		
	Median (IQR)	1 ,1 -2		
Hospitalization	≥1, %	96343 (53.5%)		
	Median (IQR)	3 ,1 -10		
Maccabi ER Visits	≥1, %	75048 (41.7%)		
	Median (IQR)	2 ,2 -5		
Sick Leave	≥1, %	73865 (41.0%)		
	Median (IQR)	5 ,2 -12		
Sick Leave not in pension	≥1, %	65371 (56.0%)		
	Median (IQR)	6 ,2 -13		
Any Procedure	≥1, %	104007 (57.7%)		
	Median (IQR)	101 ,49 -187		
Arthroplasty	≥1, %	6200 (3.4%)	67.1 (9.8)	66.9
	Median (IQR)	1 ,1 -2		
Arthroscopy	≥1, %	3079 (1.7%)	57.3 (10.4)	55.3
	Median (IQR)	2 ,1 -2		
Fusion	≥1, %	10 (0.0%)	58.0 (16.8)	50.0
	Median (IQR)	1 ,1 -1		
Hyaluronic acid injection	≥1, %	469 (0.3%)	67.0 (9.9)	70.1
	Median (IQR)	3 ,2 -4		
Intra-articular injection	≥1, %	23919 (13.3%)	65.8 (10.8)	69.3
	Median (IQR)	2 ,1 -4		
Nerve block	≥1, %	655 (0.4%)	66.0 (10.9)	78.6
	Median (IQR)	2 ,1 -3		
Osteotomy	≥1, %	348 (0.2%)	61.9 (9.7)	80.7
	Median (IQR)	1 ,1 -2		
Physiotherapy	≥1, %	82485 (45.79%)	65.0 (11.5)	65.4
	Median (IQR)	17 ,6 -38		

Figure: Percent males and females who underwent procedures



*Procedures conducted on more than 1% of the population

RESULTS CONTINUED

- Mean age of OA patients who underwent arthroscopy and fusion was relatively lower (57.3±10.4 and 58.0±16.0, respectively) compared to the mean age of those treated by other procedures. A higher proportion of females underwent procedures, compared to males (Figure).

CONCLUSION

The proportion of sick leave and health care utilization among OA patients is about 40-60% during a relatively short period. Future research comparing OA patients with the general population may shed light on the OA economic burden on society and the toll on a person's life.