

Supplementary table 2. Detailed study characteristics

First author	Language	Country	Design	Participants	Exposure	Outcome
Castro	English	Brazil	Cross-sectional	227 older women, mean age 70	Use of high heels with cut-off of 4.00 cm as assessed by questionnaire	Foot pain as assessed by questionnaire
Chaiklieng	English	Thailand	Cross-sectional	452 school teachers, 57% female, mean age 47	Current use of high heels expressed as binary with cut-off at 5.08cm	Repetitive Strain Injury defined as pain in neck, shoulders, hand, arm, back muscles or spine
Chua	English	Malaysia	Cross-sectional	400 working women, mean age 29	Current use of high heels expressed as binary with cut-off at 2.54cm	Foot pain occurring at least once a month and not related to trauma
Dawson (2003)	English	UK	Case-control	Cases: 29 women with knee OA awaiting knee replacement, aged 50-70. Controls: 82 women matched to cases by age and GP	Questions about past use of high heels with cut-offs at 2.54, 5.08 and 7.62cm	Case status
Dawson (2002)	English	UK	Cross-sectional	93 women without regular knee pain aged	Interview including questions on age when first worn high heels,	Foot examination including hallux valgus

				50-70 matched to cases by age and GP, mean age 63. Data from cases not presented here	shoes worn for work and in different circumstances.	and foot pain lasting more than 1 week
Dufour	English	USA	Cross-sectional	1725 older women from the general population, mean age 66	Use of high heels at 20-29, 30-44 and 45-65 years was defined as always (most common shoe at all 3 age bands), sometimes and never	Validated foot assessment including hallux valgus
Gabell	English	UK	Prospective cohort	100 normal older people, 55% female, aged 65-85	Information on 50 personal predisposing factors for falls was collected including heel-height history	Participants were asked to report all falls and given fall-report cards
Hong	English	Taiwan	Repeated measures experiment	20 young women who had not suffered major injury to extremities, mean age 25	Participants wore shoes with flat (1.0cm), low (5.1cm) and high (7.6cm) heels during the study	100mm visual analogue scale of comfort perception
Keegan	English	USA	Case-control	Cases: 2348 people over the age of 45 who fell causing a fracture. Controls: 512	Type of shoe worn at time of fall was recorded with regard to heel height and width	Case status

McWilliams	English	UK	Case-control	<p>people matched by age groups who fell in past year but did not fracture</p> <p>Cases: 483 women with knee OA and 521 women with hip OA. Controls: 550 women referred to hospital for intravenous urography</p>	<p>Questionnaire regarding past footwear use during adulthood. Shoes were characterised as low, medium or high and as wide- or narrow-heeled. Predominant footwear type taken as >50% use during 20-29 and 20-39 year age brackets</p>	<p>Case status separately for knee and hip OA</p>
Menz	English	Australia	Cross-sectional	<p>176 older people (68% female) living in a retirement village, mean age 80</p>	<p>Participants were asked to bring their most common indoor and outdoor shoes. Tracings were made and digitised. Shoe parameters including heel height calculated. Participants were also asked whether they had ever regularly worn heels over 5.08cm and how frequently they currently wore them</p>	<p>Hallux valgus assessment using Manchester scale</p>

Moore	English	USA	Retrospective audit	All first party injuries to women (n = 3294) attributable to high heels in the Consumer Product Safety Commission's National Electronic Injury Surveillance System (NEISS) between 2002-2012. There were no age criteria	High heels noted as injury cause in NEISS	Injury resulting in presentation to emergency department
Nagata	English	Japan	Retrospective audit	425 stair accidents were selected for investigation and compared with 1043 sets of stairs where no accidents had occurred. Accidents related to	Interviews with accident victims included a question on type of footwear worn at the time of accident. High or semi-high heel was classified as >3cm	Profile of stair-related injuries sustained at work

Nguyen	English	USA	Retrospective cohort	sweeping, mopping or surface repairs were excluded. This study assessed participants of working age 386 older women, mean age 78	Questionnaire on past use of high heels at ages 20-29, 30-44 and 45-64 with cut-off at 5.08 cm	Validated foot assessment for hallux valgus
Sherrington	English	Australia	Retrospective audit	95 older adults who had suffered a fall, mean age 78	Parameters of shoes worn at time of fall including heel height were measured, with high heels cut-off at 5cm	Fall-related hip fracture
Tencer	English	USA	Nested case-control	1371 older adults aged 65 or over of whom 327 reported a fall and 327 served as matched controls. A third were aged 80 or older	Shoes worn at time of fall (cases) or matched activity (controls) divided into 10 categories by heel height, width and critical angle. High heels cut-off was at 2.50cm	Case status

Williams	English	Australia	Retrospective audit	All injuries (n = 305) documented in the Victoria Emergency Minimum Dataset (VEMD) as attributable to high heels between 2006-2010. There were no age criteria	High heels noted as injury cause in VEMD	Injury resulting in presentation to emergency department
Yung-Hui	English	Taiwan	Repeated measures experiment	10 healthy young women who had not suffered injury to lower extremities in last year, mean age 23	Participants wore shoes with flat (1.0cm), low (5.1cm) and high (7.6cm) heels during the study	100mm visual analogue scale of comfort perception

GP = general practitioner, NEISS = National Electronic Injury Surveillance System, OA = osteoarthritis, VEMD = Victoria Emergency Minimum Dataset