

Background

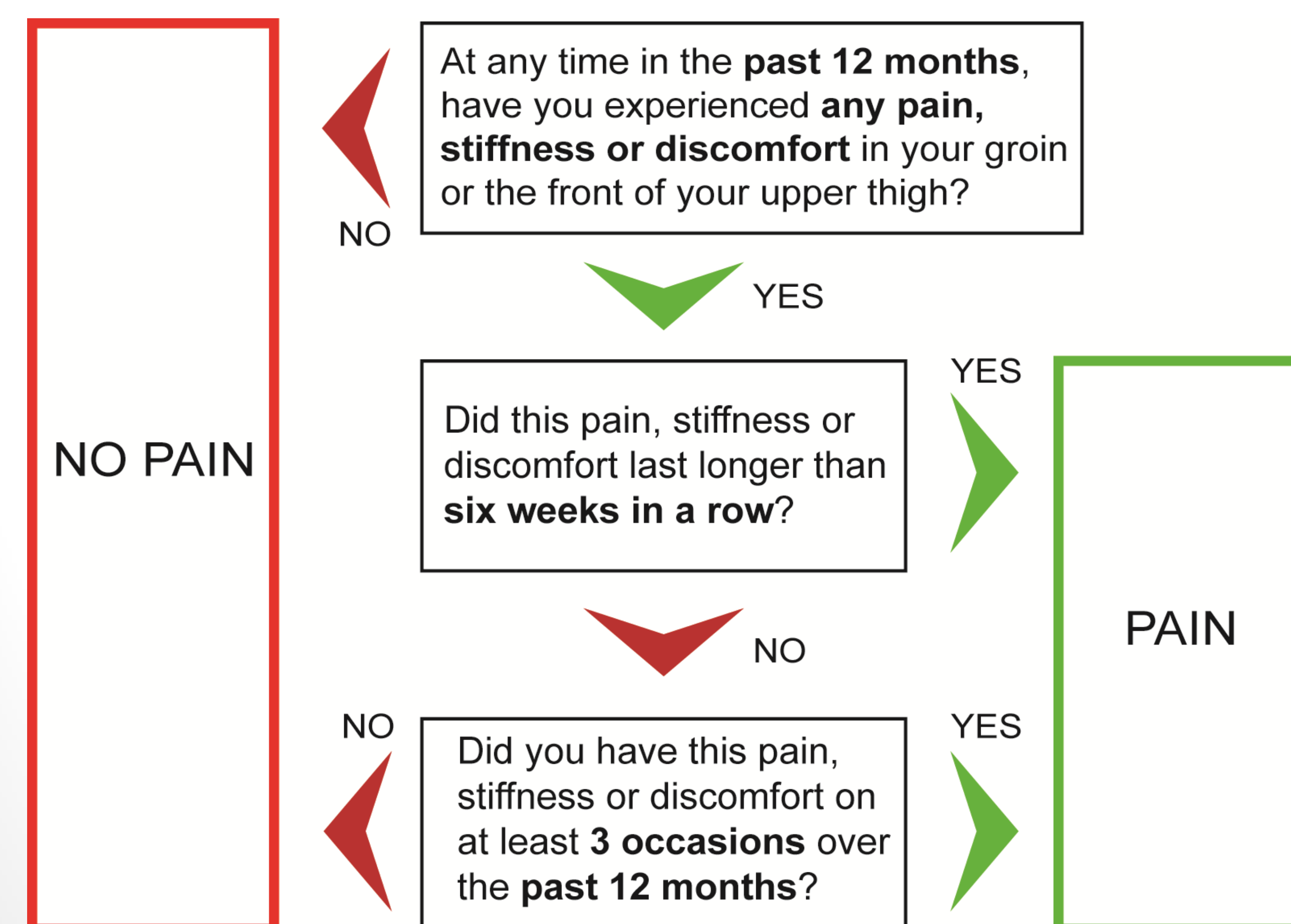
- Osteoarthritis (OA) is one of the leading causes of disability, and its aetiologies are still being investigated.
- The prevalence of hip OA among different ethnicities is not well characterized.
- A Danish study found the prevalence of hip OA to be 9.5% in men and 11.2% in women. Also, a previous uncontrolled study found a very low prevalence of hip OA among Chinese elderly.

Purpose

- To estimate the prevalence of self-reported hip pain using telephone screening questions
- To explore the association between the Chinese ethnicity and hip pain using the Caucasian population as a control.

Methods

- Participants were recruited from a cross-sectional telephone household survey in Vancouver, BC by a polling company using a standardized screening questionnaire to determine hip pain.
- Eligibility:** 1) aged 20-49 years; 2) both parents were of Chinese or Caucasian descent



Results

- A total of 369,550 random digit calls were made, of which 3,091 households completed the survey. (Table 1)
- 375 (12.1%) reported having hip pain based on the screening questions. Of the Caucasian participants, 295 (12.6%) reported having hip pain. Among the Chinese participants, 80 (10.8%) reported the same. (Figures 1 and 2)
- Logistic regression revealed that, compared to Caucasians, estimated odds of reporting 'pain, stiffness or discomfort in the groin or front of upper thigh in the past 12 months' was significantly lower in the Chinese population, after adjusting for age and sex.
- When asked the follow-up questions, Chinese had a lower odds of reporting hip pain, but it was not statistically significant. (Figure 3)

Figure 1: Presence of hip pain in Chinese and Caucasians

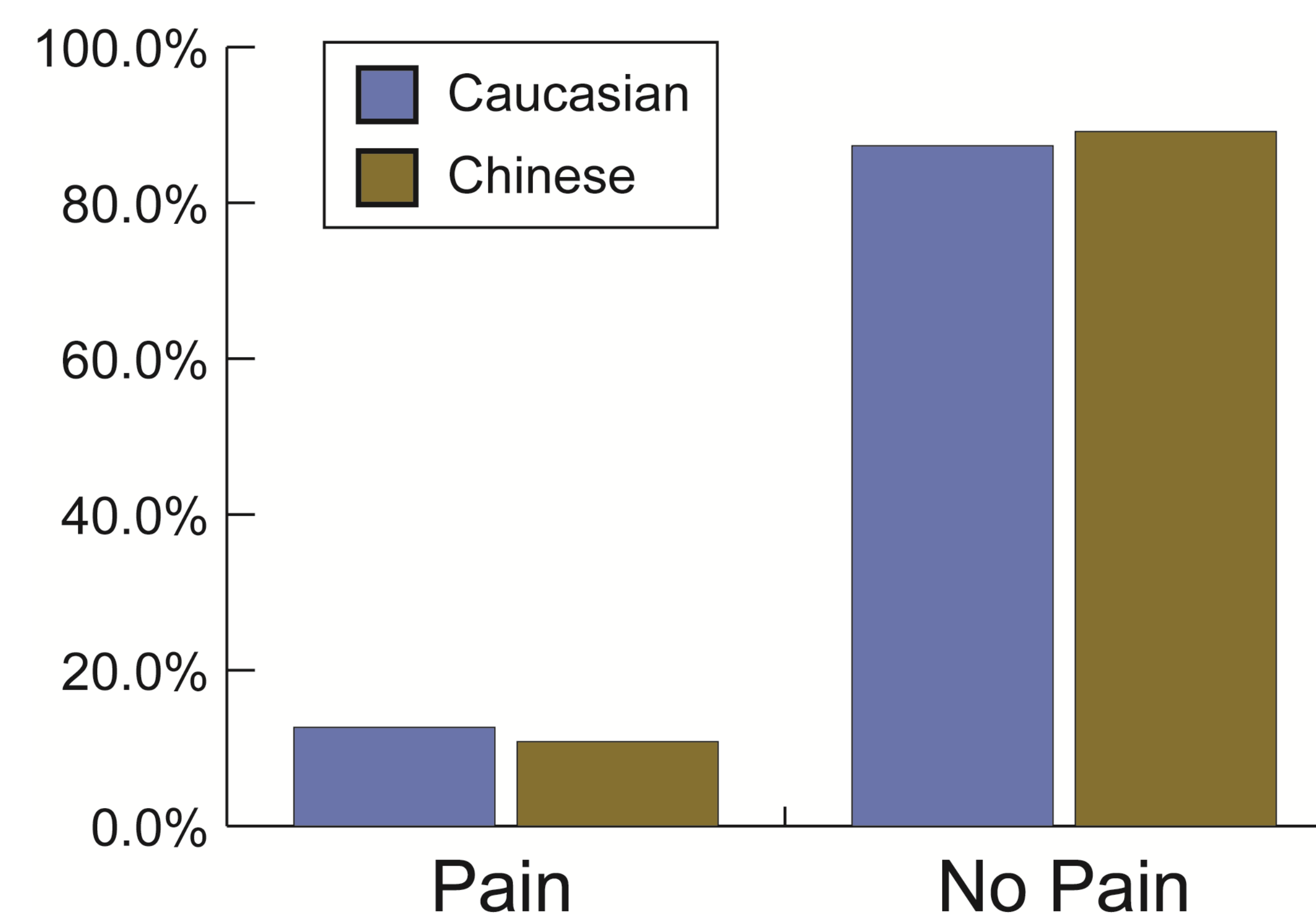


Table 1: Participant Characteristics

N = 3,091	
Caucasian	n = 2,350 (76.0%)
Women	1,516 (64.5%)
Age	
20 – 29 years	282 (12.0%)
30 – 39 years	698 (29.7%)
40 – 49 years	1,370 (58.3%)
Chinese	n = 741 (24.0%)
Women	507 (68.4%)
Age	
20 – 29 years	172 (23.2%)
30 – 39 years	176 (23.8%)
40 – 49 years	393 (53.0%)

Figure 2: Presence of hip pain in 3 age groups

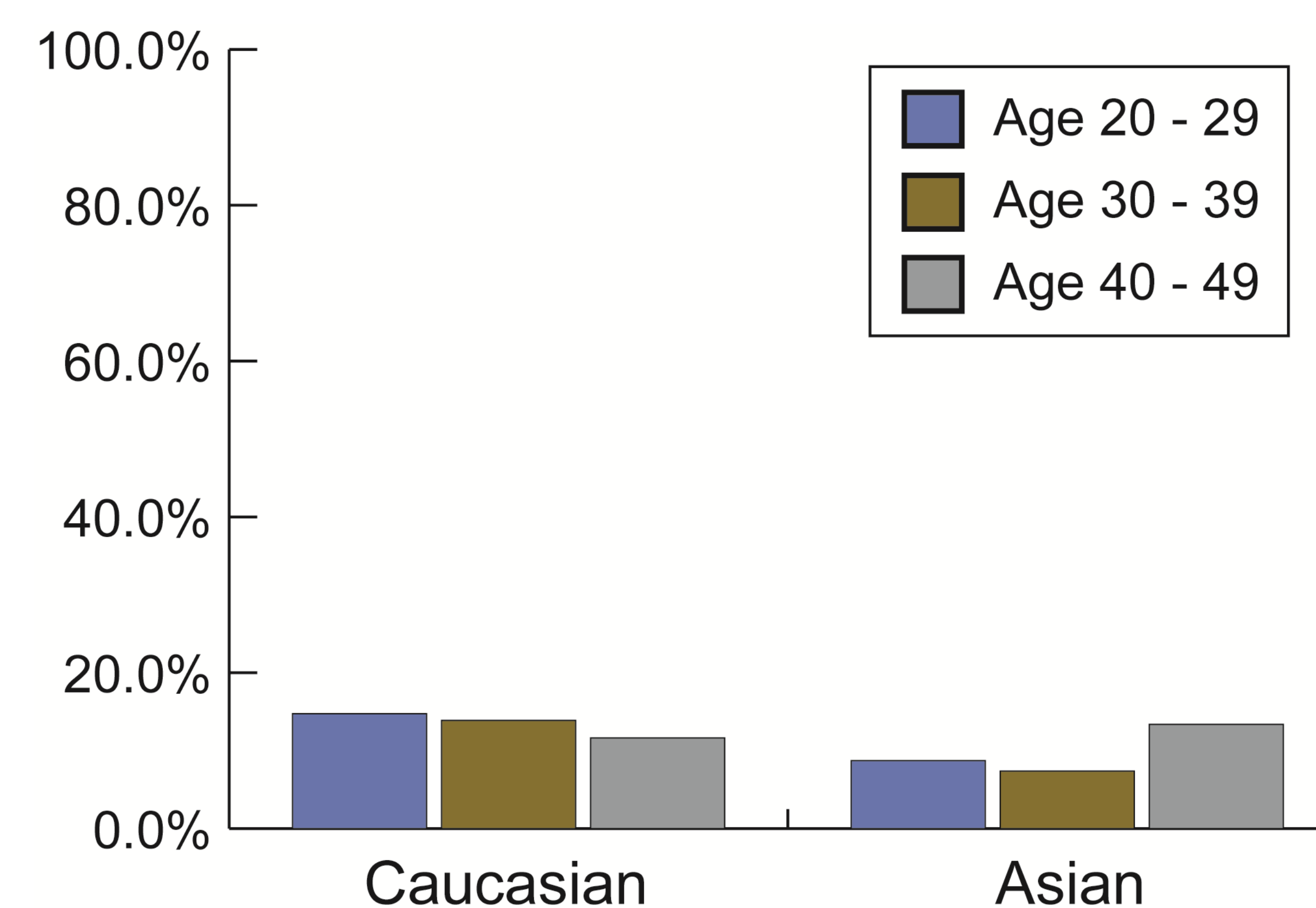
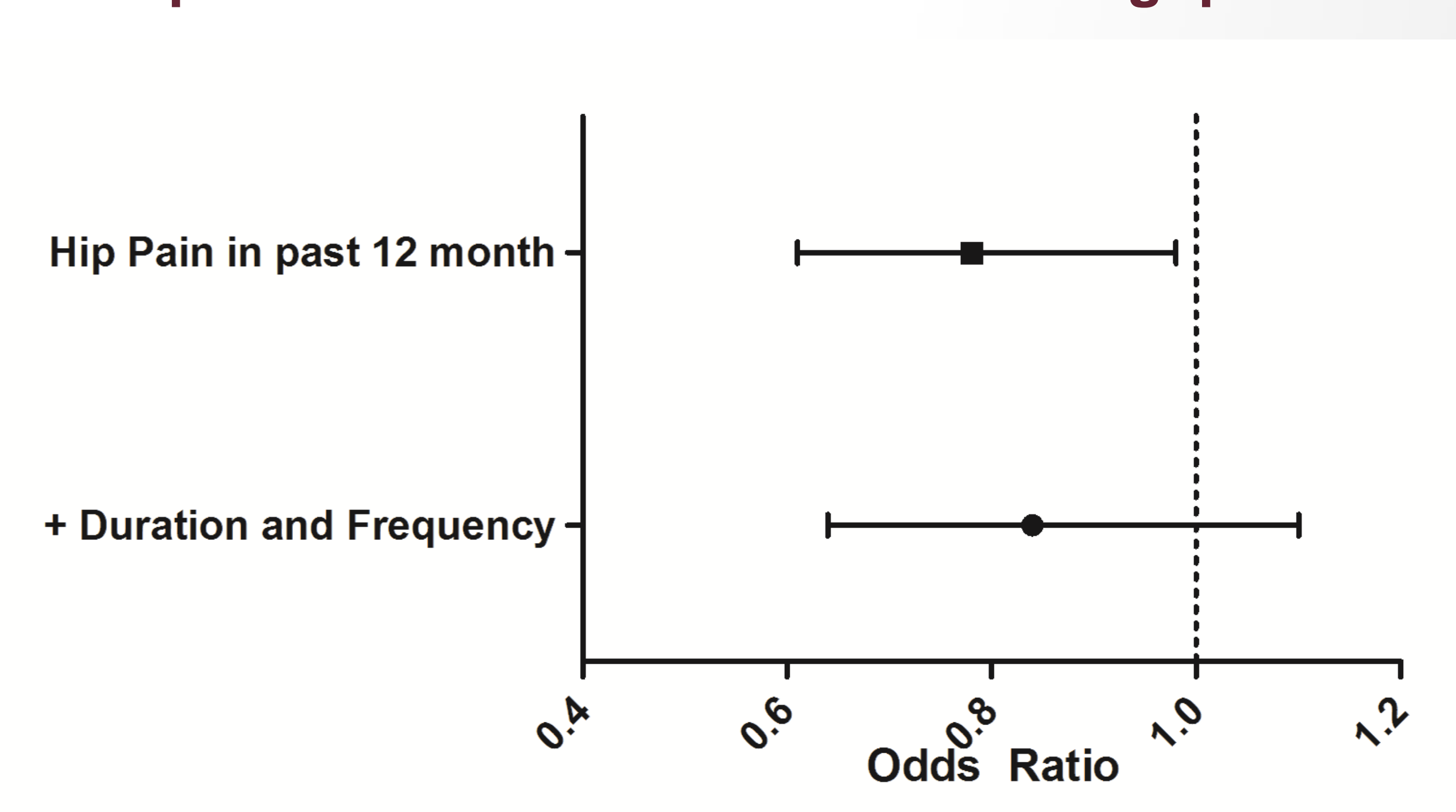


Figure 3: Odds of reporting hip pain in Chinese compared to Caucasians with screening questions



Conclusion:

- Lower prevalence of hip pain was reported in the Chinese as compared to the Caucasian population when used a single screening question.
- Age- and sex-adjusted difference in prevalence between the two ethnicities was not significant when specific questions related to the duration or frequency of symptoms were included.

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References:

- Gosvig et al., Prevalence of malformations of the hip joint and their relationship to sex, groin pain, and risk of OA. 2010. J Bone Joint Surg Am, 92:1162-9.
- Nevitt et al., Very low prevalence of hip osteoarthritis among Chinese elderly in Beijing, China, compared to whites in the United States: the Beijing osteoarthritis study. 2002. Arthritis Rheum. 46(7): 1773-9.