

Investigating physical activity and musculoskeletal pain in Nordic Walkers using digital technology.

Sumeng Wang¹, Garrett S. Bullock², Stefan Kluzek¹, Joanne Stocks¹

¹University of Nottingham, Nottingham, United Kingdom,

²Wake Forest School of Medicine, NC, United States of America

Background: Nordic Walking is a popular fitness activity using specially designed ski poles, suitable for all fitness levels. It provides a full-body workout, improving upper and lower body muscular strength, flexibility and cardio-respiratory fitness. Little research investigating Nordic Walker's exercise habits currently exists.

Aim: To use digital technology to investigate physical activity levels and musculoskeletal pain prevalence in Nordic Walkers.

Methods: Between February – December 2021 a prospective global cohort study, 'Running Through', was used to collect data weekly from Nordic Walkers via electronic survey and the sharing of activity data from smartwatches and mobile phone apps.

Results: The baseline survey was completed by 55 participants, 76% female, mean age 57 years (SD 10.1), mean body mass index (BMI) 24.1 (S.D. 4.5). A total of 27.3% reported currently experiencing pain and discomfort in their spine, back or neck. Pain, discomfort, or problems with their hip(s) or groin was experienced by 20%, with pain also reportedly experienced on most days of the last month in knees (20% respondents) and ankles (7.3%). Respondents shared their smart device data for a mean of 13 weeks (range 1-26). Nordic Walkers reported that they participated 2 times a week (S.D. 1) recording a mean weekly distance covered of 20.9Km (range 9.1-32.8).

Conclusion: Nordic Walking is particularly popular with older adults, enabling them to meet weekly physical activity guidelines despite self-reporting musculoskeletal pain. Further studies with appropriate technical instruction should investigate if Nordic Walking is a suitable activity for specific painful musculoskeletal conditions such as osteoarthritis.

This abstract is embargoed until presented at the Congress of the European Pain Federation (EFIC),
Dublin, Ireland, 27-30th April 2022.