

OA Action Alliance: Steps to Walkable Environments



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Background

- Arthritis is the leading cause of disability among older adults.
- Walking decreases pain and improves mobility for people with arthritis but is widely underutilized.
- Numerous walkability instruments exist for health planners but which items are necessary for people with arthritis is not known.

Purpose

- To identify a 'short list' of factors that may be uniquely important to a large number of people with arthritis to promote walking activity in the community for potential use with walkability assessments used by public health departments

Methods

- A modified Delphi study was conducted with community-dwelling consumers with arthritis and health experts to identify walkability features for people with arthritis.
- Participants were recruited through Arthritis Foundation and community resources, existing research participant databases, and professional organizations.
- An online survey was implemented to ascertain factors that were important specifically for people with arthritis. Descriptive statistics were used to identify the most commonly reported items. A second survey was implemented to ascertain if people agreed or disagreed with the importance of the item as well as how the items should be rank ordered.
- An interactive consensus-generating process was used to identify the most consistently agreed upon factors among consumers and health professionals.

Results

- 149 consumer participants and 26 health professionals completed and online survey
- The mean age of the consumer group was 58yo; 90% were female; 83% were white/Caucasian; 95% had at least some college education; 91% reported walking for at least 10 minutes at a time. Arthritis Foundation, American College of Sports Medicine, American College of Rheumatology, and the Association of Rheumatology Health Professionals were most frequently reported professional organizations.
- The most commonly reported environmental features are in Table 1. Health professionals reported similar features but rankings were somewhat different (Table 2).

Table 1. Environmental features important for physical activity: Consumers

	Disagree/Strongly Disagree, n (%)	Neutral n (%)	Agree/Strongly Agree, n (%)	Ranking
Safety from crime	1(1.1)	8 (8.5)	85 (90.4)	1
Smooth and level walkways	0 (0)	3 (3.2)	91 (96.8)	2
Safety from injury (e.g., falling; collisions with cars, bikes, or people)	0 (0)	3 (3.2)	91 (96.8)	3
Walking areas separate from roads (e.g., sidewalks)	0 (0)	10 (10.6)	84 (89.4)	4
Places to sit	3 (3.2)	9 (9.6)	82 (87.2)	5
Ramps and railings at stairs	1 (1.1)	9 (9.6)	84 (89.3)	6
Walkways free of objects blocking the path	0 (0)	5 (5.3)	89 (94.7)	7
Street lighting	1 (1.1)	14 (14.9)	79 (84.1)	8
Walking trails	2 (2.1)	18 (19.1)	74 (78.8)	9
Curb cuts at sidewalk crossings	2 (2.1)	19 (20.2)	73 (77.7)	10
Pleasant surroundings (e.g., trees, no litter)	3 (3.2)	16 (17.0)	75 (79.8)	11
Green space and parks	3 (3.2)	24 (25.5)	67 (71.3)	12
Swimming pool	9 (9.6)	22 (23.4)	63 (67.0)	13
Weather	7 (7.4)	25 (26.6)	62 (66.0)	14

Table 2. Environmental features important for physical activity: Health Professionals

	Disagree/Strongly Disagree, n (%)	Neutral n (%)	Agree/Strongly Agree, n (%)	Rankings
Smooth and level walkways	0 (0)	0 (0)	19 (100)	1
Walking areas separate from roads (e.g., sidewalks)	0 (0)	0 (0)	19 (100)	2
Green space and parks	0 (0)	0 (0)	19 (100)	3
Places to sit	0 (0)	1 (5.2)	18 (94.7)	4
Safety from injury (e.g., falling; collisions with cars, bikes, or people)	0 (0)	0 (0)	19 (100)	5
Walkways free of objects blocking the path	0 (0)	1 (5.2)	18 (94.7)	6
Safety from crime	0 (0)	1 (5.2)	18 (94.7)	7
Street lighting	0 (0)	2 (10.5)	17 (89.5)	8

Conclusions

- The top 8 features for walkable environments were: safety from crime, safety from injury, walkways free of objects blocking path, walking areas separate from roads, smooth and level walkways, street lighting, places to sit and rest, and ramps and railings at stairs.
- Existing walkability assessments should include these items that are important for people with arthritis.

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