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Title

Which neighborhood characteristics are most associated with neighborhood walking-An NHIS study

Priority 1 (Research Category)

Population health and epidemiology

Presenters

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Abstract

Context: Physical activity (PA) is a key factor in achieving and maintaining health throughout the lifespan. Most Americans do not meet PA recommendations, but neighborhood walking may be a solution. Understanding which neighborhood factors are most strongly associated with neighborhood walking could inform exercise prescriptions from clinicians.

Objective: To examine which perceived neighborhood factors are associated with neighborhood walking, walking for leisure, & active travel in a population of US adults.

Study Design & Analysis: Cross-sectional, with unadjusted analysis assessing the relationships between neighborhood environment & walking behavior via standardized mean difference (SMD) to inform model building strategy. Weighted-adjusted analysis via multivariate logistic regression including significant confounders.

Setting or Dataset: National Health Interview Survey (NHIS)-2020

Population Studied: Adults aged ≥ 18 years with no missing data on demographics or variables of interest

Intervention/Instrument: Neighborhood perception via 9 items regarding built & social environment

Outcome Measures: Odds of neighborhood walking, odds of walking for leisure, & odds of walking for transport

Results: The final sample included 25817 adults. Most of the population (48.7%) were 18-44 years old. The population was 51.2% female, 63.1% white. In fully adjusted models, factors associated with neighborhood walking were roads to walk & places to walk & relax (OR=1.62[95%CI=1.43-1.82], OR=1.57[95%CI=1.44-1.71, respectively). Factors associated with any walking for transport included shops to walk to, availability of transit stops, fun destinations to walk to, places to walk & relax, & presence of sidewalks (OR=2.00[95%CI=1.74-2.32], OR=1.63[95%CI=1.44-1.85], OR=1.46[96%CI=1.29-

1.66], OR1.24[95%CI=1.07-1.44], OR=1.20[95%CI=1.06-1.36], respectively). Factors associated with any walking for leisure included roads to walk on & places to walk & relax (OR=1.44[95%CI=1.28-1.62], OR=1.45[95%CI=1.32-1.59], respectively).

Conclusions: In this study of a general US adult population, neighborhood factors most associated with each type of activity varied by the purpose of walking, with walking for transport having the most associated factors. The purpose for walking should be considered when clinicians discuss neighborhood walking. Future studies will explore whether specific health conditions may impact which neighborhood factors are associated with walking behavior.