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Title

Health Equity and Active Transportation: a scoping review of active transportation interventions' impact on health equity

Priority 1 (Research Category)

Social determinants and vulnerable populations

Presenters

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Abstract

Context: Changes to the transportation system that promote active transportation – walking, cycling, public transit – can promote important population health gains. However, these potential benefits may not impact everyone equally. We do not know how much they may address, or conversely exacerbate, existing racial and socioeconomic health disparities.

Objective: This study aims to review existing research that investigates the distribution of health impacts of active transportation interventions across indicators of race, ethnicity, or socioeconomic status (SES).

Study Design and Analysis: We conducted a scoping review of peer-reviewed literature to identify studies evaluating the health outcomes of active transportation interventions and comparing differences between groups based on race, ethnicity, or SES. We searched PubMed, Scopus, Web of Science, and Transport Research International Documentation between January 1, 2000 and October 21, 2020. We reviewed records for study characteristics and if/how equity was included in the conceptual model, design, analysis, or discussion.

Results: Our search resulted in 7226 records that we screened for keyword relevance by title. We identified 3246 abstracts to review further but ultimately found only 10 studies meeting all our inclusion criteria. These 10 studies evaluated behavior change programs, pedestrian and cycling infrastructure improvements, and increased transit infrastructure or access. Eight of these studies found that the intervention had a positive impact on health outcomes overall. When compared across indicators of participant race, ethnicity, or SES, nine found either no significant difference or a favorable impact of the intervention on the health outcome for disadvantaged groups studied.

Conclusions: A significant gap in the literature persists, representing missed opportunities to further our understanding of how health inequities might be addressed through changes in active transportation infrastructure, promotional campaigns, and policies. Improved understanding of associations between active transportation interventions, health co-benefits, and health inequities can equip primary care providers to more strategically advocate for community interventions that address key upstream determinants of health. We call for researchers investigating active transportation interventions to include equity in the development of conceptual models, interventions, study design, and data analysis.