Passive commuting is associated with weight status of post-secondary students
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Background and Objective:
- Weight gain common in young adults; associated with later life non-communicable disease (NCD)
- Contributing factors: Being male, ↑ age, ↑ SES, ↓ social support, financial security, spirituality
- Passive commuting (by car and bus) may contribute, but not well studied
- This study examined passive commute times & weight status in post-secondary students

Methods:
Sample: Postsecondary students (n=374; 17-26 years); data collected from 2016 to 2017
Measures:
  i. Outcome: BMI (wt kg / ht m^2); dichotomized → 18.5-24.9 & ≥ 25 kg / m^2
  ii. Exposure: Average time/week spent in passive commuting
  iii. Covariates: Age, sex, ethnicity, living situation, sedentary activities (# hrs/wk watching TV + computer time; >26 hours=excess), overall wellness score (National Wellness Institute’s TestWell Wellness Inventory)
Analysis: Descriptive (Mean, and Frequency), Bivariate, and binary logistic regression, P value < 0.05

Results:
- Most were female (80%), around 19 years (SD ± 1.96); had a BMI within the healthy range (77%), non-Caucasian (63%), & lived with other people (87%)
- Most had above average wellness score (mean=378±2.24) and spent about 25 (±17.1) hours/week in sedentary activities
- Passive commuting times ranged from 1.5-40 hours/week
- Significant differences were found between those with BMIs within and above the healthy range by commute times (t=2.315, p=0.021)
  For each additional hour of weekly commute time:
  → likelihood of being within the healthy BMI range ↓ by 3% (aOR=0.97, 95% CI 0.95-0.99, p=0.015)

Conclusions:
Based on previous studies, modifiable targets to mitigate passive commute-related weight gain include diet, activity, alcohol consumption, peer influences, and academic workloads. Strategies to increase active commuting in post-secondary students may also help in healthy weight management which can prevent NCD in later life.

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