ASSOCIATION BETWEEN SOCIOECONOMIC STATUS AND ACCESS TO TRAUMA CARE FOR VICTIMS OF INJURY IN A CANADIAN TRAUMA SYSTEM

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The association between low socioeconomic status (SES) and increased population-based risk of injury is well documented. However, little is known about the association between SES and access to trauma care. We aimed to evaluate the association between SES and time to definitive trauma care in an inclusive Canadian trauma system. SES was quantified using an ecological index of material deprivation via patients residential postal code. Data was drawn from the Quebec trauma registry based on mandatory data collection for all patients with major trauma treated within the inclusive provincial trauma system (1999–2006). The association between SES and time to definitive care was evaluated using hierarchical
linear regression. The study sample comprised 88,235 patients treated in 59 trauma centres. The proportion of patients in the highest quintile of material deprivation ranged from 16% in metropolitan regions to 71% in regions with no metropolitan influence. Following adjustment for injury severity, age and comorbidity, those in the highest quintile of material deprivation had a mean time to definitive care 0.926 h longer (p<0.0001) than those in the lowest quintile. However, after adjustment for region of residence, the mean time difference approached zero (0.075 h, p=0.2). High material deprivation is associated with longer delays to definitive care. However, this association appears to be entirely explained by the fact that patients with high material deprivation are more likely to live in rural regions and are therefore further from hospitals offering definitive trauma care.