Will Autonomous Vehicles address impediments to the mobility of ageing populations?

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Background/Aims

Autonomous Vehicles (AVs) have been touted as a ‘mobility panacea’ for ageing populations. The hopes invested in such technocentric solutions can be understood with reference to the spatial-temporal context of the Global Demographic Transition. The geography of ageing culminates in growing levels of social isolation of older populations in rural, regional and suburban areas. This spatial trend is superimposed on a temporal landscape of recurring economic crises, creating fiscal constraints impeding the efficacy of conventional solutions including scheduled and demand-responsive transport. To what extent can AVs respond to the mobility needs of older people at a time of fiscal crisis?

Methods

To address this knowledge gap, I undertook a systematic literature review with two academic colleagues from Curtin University in 2019. We reviewed the AV related papers and the wider transportation planning and gerontological research inclusive of factors known to influence the mobility of older people. The research informed a critical perspective exploring possible impacts, inclusive of risks and opportunities through the methodology of scenario analysis.

Results

We found the technology had the capability to address some aged mobility needs such as those resulting from declining driving ability, and might provide a framework supportive of ‘ageing in place’ solutions.
Conclusions
The ability to realise the full potential of this ‘socio-technical transition’ and effectively manage unintended impacts, will be informed by society’s institutional capacity inclusive of the State’s ability to implement timely interventions in mobility markets and provide an integrated approach to transport and land use planning.