Ambulance data: crucial for capturing 'hot-spots' of pre-hospital AOD-related harms

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Introduction: Effective surveillance of acute AOD-related harms needs to consider a variety of population-level data sources that capture information on the location, temporal patterns, and contexts of both use and harms. This presentation will examine the utility of ambulance data to contribute to this understanding, and demonstrate the need to assess AOD-related harms at a local level in order to map and track 'hotspots' of acute harms.

Method: Data from the Victorian arm of the National Ambulance Surveillance System (NASS) focused on alcohol and GHB will be presented, given recent media interest in harms associated with these drugs. NASS data are built on paramedic electronic patient care records that are enhanced through coding of clinical notes by a team of Research Assistants at Turning Point. Key variables coded as part of NASS include all AOD, mental health, and suicide and self-harm behaviour ambulance attendances, as well as sociodemographic and location information.

Key Findings: Alcohol intoxication-related ambulance attendances increased over a 10-year period across Victoria from 18,125 (2012) to 25,391 (2021), but the distribution of these across different local government areas (LGAs) was uneven. Multilevel regression models found that specific LGAs were associated with the highest number of alcohol attendances, with adjusted multilevel models accounting for population, SEIFA and remoteness identifying the highest being Frankston, Greater Dandenong and Geelong. Increases in GHB-related attendances were observed over the same timeframe from 685 (2012) to 1,850 (2021), with the highest number of attendances in Melbourne, Port Phillip, Geelong and Stonnington.

Discussions and Conclusions: Our findings highlight the utility of ambulance data to map and track AOD-related harms over time, with contextualisation of localised factors being important in understanding how these impact communities. The importance of environmental factors (e.g., licences), legal status (e.g., alcohol vs GHB), and sociodemographic modifiers in assessing the level of harm attributable to each drug will be discussed.

Implications for Practice or Policy: The 'hotspot' detail provided by this analysis has utility for both governance (e.g., for organisations determining liquor license applications), and policy makers (e.g., in resource allocation for areas with the highest AOD risk).

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