Alcohol-related harm and Aotearoa New Zealand emergency departments

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Alcohol and the burden on the Aotearoa New Zealand health system

Alcohol is the most widely consumed drug in Aotearoa New Zealand, with one in five New Zealanders regularly consuming alcohol at a level that increases their risk of alcohol-related injury or illness.[1] The burden on society of alcohol-related harm is significant, with an estimated cost of NZ$7.85 billion per year in lost productivity, unemployment, crime, healthcare, ACC and welfare costs.[2] The consequences of harmful drinking are seen regularly in emergency departments (EDs), with people presenting with acute alcohol intoxication or injuries related to alcohol use. ED presentations also occur due to acute exacerbations of chronic diseases related to alcohol, including numerous cancers, neuropsychiatric conditions and cardiovascular and gastrointestinal diseases. The burden of alcohol-related presentations on already-overcrowded EDs is preventable. Major reform on how alcohol is promoted, legislated and consumed in Aotearoa New Zealand is required to reduce the harm that alcohol is causing—both on individuals and on the wider healthcare system.

Alcohol and ED overcrowding

Emergency departments around the world are increasingly overcrowded, which has been shown to cause harm to all patients. The contributor to ED crowding that is most strongly associated with adverse outcomes for patients is hospital access block for admitted patients. For every patient who arrives in an Aotearoa New Zealand ED at a time when more than 10% of admitted patients had an ED length of stay greater than 8 hours, there is a 10% increased risk of death within 7 days.[3] Recent data from the United Kingdom has shown that there is one excess death for every 82 patients who spend longer than 6–8 hours in ED.[4] Alcohol use contributes to ED overcrowding, with 5–7% of ED presentations thought to be alcohol-related,[5] and results in longer lengths of stays than non-alcohol-related presentations.[6] Alcohol is a factor in 16–21% of injury-related ED attendances,[7] with a fivefold risk of death in the year after admission for those presenting to ED with an injury associated with alcohol use.[8]

Violence and aggression in ED

Alcohol is a significant contributor to violence and aggression within acute healthcare settings.[9] For staff working in an ED that is already under considerable pressure due to overcrowding, occupational violence and aggression associated with alcohol use can contribute to and exacerbate emotional exhaustion, moral distress, anxiety, depression, burnout and post-traumatic stress disorder.[10] The consequences for a health system in crisis with inadequate staffing levels is significant, with decreased job satisfaction, diminished productivity, absenteeism and difficulties with recruitment and retention of staff. In a recent survey by the Australasian College for Emergency Medicine, 71% of staff reported that they frequently experience alcohol-related abuse, threats, intimidation or harassment from patients, and that this has negatively impacted on their wellbeing, job satisfaction, safety and workload.[11]

Alcohol in relation to suicide and mental health

Emergency departments across Australasia are seeing increases in presentations related to mental health and suicidal thoughts and behaviours.[12] Alcohol has a complex but intertwined relationship with these issues, and thus, may contribute to these presentations. At a distal level, Aotearoa New Zealand cohort studies have shown that heavy alcohol use is causally associated with major depression and associated with an increased risk of suicidal ideation.[13] At a proximal level, using meta-analysis, acute alcohol use is associated with seven times the risk of suicide attempt.[14] A recent Australian study found that the two most common principal diagnoses that involved prior alcohol use were mental and behavioural disorders, and suicidal ideation.[15] Patients' presentations

related to mental health and suicidal ideation are complex, and as such, ED staff may require a significant amount of time to deliver appropriate healthcare. While acknowledging that brief interventions relating to alcohol are possible within an ED environment, given that alcohol-related harm is modifiable, we argue that a greater focus on alcohol harm reduction at a population-level is likely to have more overall impact.

Current Aotearoa New Zealand alcohol purchase and consumption behaviours

Although media attention often focusses on young people drinking in pubs and bars on a Saturday night, a recent study showed that this may not be the case.[16] Over one-third of older New Zealanders are drinking at levels which may result in harm.[17] Older people are more likely to have additional co-morbidities and the potential for medication interactions, therefore increased risk of serious consequences. Off-license alcohol venues, such as bottle stores, supermarkets and online sales, remain the primary source of alcohol purchase. This highlights the need for stronger local alcohol policies for off-license venues, particularly as they are a key supplier of large quantities of cheap alcohol and contribute to Aotearoa New Zealand's drinking culture as a whole. With the recent passing of the *Sale and Supply of Alcohol (Community Participation) Amendment Bill*, councils can now implement strong controls on alcohol availability without the risk of alcohol industry appeals, particularly from alcohol retailers.

Data and monitoring and public health

Public health relies on surveillance data to identify population-level trends and assess the impacts of policy changes. EDs are an important monitoring site, as they see a diverse range of alcohol-related harms, both chronic and acute, and with varying degrees of severity. Current systems for routine data collection on alcohol within EDs are inconsistent in Aotearoa New Zealand, which is hindering evidence-based decision making. It is vital that location-specific data be collected, particularly as local councils across Aotearoa New Zealand are developing and reviewing local alcohol policies. Therefore, there is a need for standardised data collection to be implemented across Aotearoa New Zealand EDs. Harms from alcohol can be diverse, and broader than just medical, thus requiring triangulation across data sources to build an accurate picture of harm.[18] ED data could be supplemented with police data, which has the benefit of also being location-specific but measures other harms such as crime and violence. Aotearoa New Zealand should also consider the implementation of detailed ambulance data collection for alcohol-related harm, such as what is done in Australia.[19]

Conclusions

Alcohol-related harm is preventable. It contributes to ED overcrowding with a significant impact on all patients requiring care, puts considerable stress on hospital staff and resources and places a high financial burden on the entire health system. A centralised inter-agency dataset is required to fully understand the level of harm that alcohol is causing within our communities and allow us to evaluate the impact of changes in policy over time. The implementation of evidence-based alcohol policies, both local and national, is urgently required to improve the health of our communities.

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COMPETING INTERESTS
None to declare.

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