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Do relaxed trading hours for bars and clubs mean more relaxed drinking? A review of international research on the impacts of changes to permitted hours of drinking

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Abstract

Trading hours of licensed premises have been progressively relaxed since World War II across much of the English speaking world as part of a global trend towards deregulation. This review was informed by a systematic search of studies published in the English language since 1965 which sought to evaluate the public health and safety impacts of changes to liquor trading hours for on premise consumption, namely "pubs" and clubs in the UK, "hotels" and "taverns" in Australia and New Zealand and "bars" in North America. The systematic search was supplemented by materials identified from the "grey literature", mostly government reports. A total of 49 unique studies met our inclusion criteria of which only 14 included baseline and control measures and were peer reviewed. Among these 14 reported at least one significant outcome indicating adverse effects of increased hours or benefits from reduced hours. Controlled studies with fewer methodological problems were most likely to report such effects. It is suggested that differences between findings from Australia and the UK following the 2003 Licensing Act are most likely due to differences in methodological approach. It is concluded that the balance of reliable evidence from the available international literature suggests that extended late night trading hours lead to increased consumption and related harms. Further well controlled studies are required to confirm this conclusion.

Keywords:

Table 1: Summary of studies of association with no baseline control observations

First author, year, location, type of publication	Description	Results	Potential confounding/limitations
Douglass et al (

Table 2: Summary of studies with baseline comparison points but no control observations

First author, year, location, type of publication	Description	Results	Potential confounding/limitations
Raymond (1969) Cited in Smith (1988c) Australia (peer reviewed)	Examined effect of 4 hr increase in closing hours on numbers of road traffic crashes.	No significant change.	Other concurrent regulatory changes.
Toomath and Nguyen (1974) New Zealand (grey literature)	Examined effect of increase from 6pm to 10pm closing on traffic casualties.	No significant change in road crash injuries.	Other concurrent regulatory (ie lower minimum drinking age) and economic changes.
Knight and Wilson (1980) UK (peer reviewed)	Examined effect of one hour increase and additional Sunday trading on alcohol consumption levels in Scotland using residential population surveys.	No significant change in alcohol consumption due to the one hour	

Rhodes

Lange and Voas (2000) Mexico/US (peer reviewed)	Examined effect of brief periods of prohibition in Tijuana on number and levels of BACs among randomly selected pedestrians and drivers returning to San Diego.	Significant reduction in numbers of intoxicated pedestrians and drivers crossing from Tijuana to San Diego after midnight during prohibition.	Changes limited to only two weekends of prohibition. Potential displacement of drinkers to other nearby areas.
Ragnarsdottir et al (2002) Iceland (grey literature)	Examined effect of unrestricted closing hours (24-hour trading) using		

Sivarajasingam et al (2007) UK (grey literature)	Examined trends over time in age and sex specific violence-related attendances to EDs, 2000 ±2007 in England and Wales (before and after introduction of unrestricted trading hours policy).	Apparent but unconfirmed (report did not provide tests of statistical significance): decline in ED attendances for assault-related injuries.	Reported limited uptake of extended and 24-hr trading. Non-random sample of EDs. Did not distinguish between alcohol and non-alcohol-related violent incidents. Concurrent changes to police powers and local and national late-night alcohol policy initiatives. Limited statistical analysis and absence of tests of significance.
Goddard (2008) Great Britain (grey literature)	Household survey of self-reported alcohol consumption from 2005 and 2006 (before and after introduction of unrestricted trading hours policy).	Marginally significant decline in consumption from 2005 to 2006 (Goddard did not provide evidence of confirmatory statistical analyses significance but was confirmed from peer reviewed article by Hough and Hunter, 2008).	Under-reported consumption likely and potential increasing tendency for individuals to under-estimate. Inaccurate reporting due to rapid increase in wine glass sizes. Declining survey participation by young people and potential declining response rate of heavy drinkers.
London Ambulance Service (2008) UK (grey literature)	Examined alcohol-related ambulance call-outs in London in from 2004 ± 2008 (before and after introduction of unrestricted trading hours policy).	Apparent but unconfirmed (report did not provide tests of statistical significance): increase in call-outs after 24 hr trading introduced.	No adjustments for population size or potential mobility of drinkers. Evidence for increasing trends prior to changes. Limited statistical analysis and absence of tests of significance.
Newton et al (2008a) and Newton & Hirschfield (2008) UK (grey literature)	Examined effect of replacing 11pm standard closing with unrestricted trading hours policy on violent crime, criminal damage, calls to police for disorder/assistance, ED attendances/ambulance call-outs in Birmingham.	Significant decline calls for disorder/assistance. No significant change other measures.	Reported limited uptake of extended and 24-hr trading. Concurrent changes to police powers and local late-night alcohol policy initiatives. Difficulties with distinguishing violent incidents on or near premises with extended versus non-extended hours.
Newton et al (2008b) and Newton & Hirschfield (2008) UK (grey literature)	Examined effect of replacing 11pm standard closing with unrestricted trading hours policy on violent crime, criminal damage, calls to police for disorder/assistance, ED attendances/ambulance call-outs in Blackpool.	No significant change.	As above.
Newton et al (2008c) and Newton & Hirschfield (2008) UK (grey literature)	Examined effect of replacing 11pm standard closing with unrestricted trading hours policy on violent crime, criminal damage, calls to police for disorder/assistance, ED attendances/ambulance call-outs in Croydon.	Significant decline in recorded violent crime. No significant change in other measures.	As above.

Newton et al (2008d) and Newton & Hirschfield (2008) UK (grey literature)	Examined effect of replacing 11pm standard closing with unrestricted trading hours policy on violent crime, criminal damage, calls to police for disorder/assistance, ED attendances/ambulance call-outs in Guildford.	Significant increase in recorded violent crime and calls for disorder/police assistance. No significant change in other measures.	As above.
Newton et al (2008e) and Newton & Hirschfield (2008) UK (grey literature)	Examined effect of replacing 11pm standard closing with unrestricted trading hours policy on violent crime, criminal damage, calls to police for disorder/assistance, ED attendances/ambulance call-outs in Nottingham.	Significant decline in criminal damage. No significant change in other measures.	As above.
Hough et al (2008a) UK (grey literature)	Examined impact of 2003 licensing act on uptake of trading hours, alcohol sales and police data on violent incidents in several towns in North of England.	No significant overall change across all sites. Limited uptake of new hours and evidence of displacement of violent incidents into early hours of the morning.	As above.

Table 3:

Chikritzhs and Stockwell (2002) Australia (peer reviewed)	Examined effect of 1-2 hr closing time extension after midnight on police reported assaults and volumes of alcohol sales attributable to individual licensed premises in Perth. Used assaults associated with premises trading with standard hours as controls.	Significant increase in reported assaults and corresponding significant increase in volumes of high alcohol content beverage sales.	Could not determine whether significant increases were due to greater level of alcohol consumption by individuals or greater numbers of patrons attending late trading premises (or both). No randomized premises.
Vingilis et al (2005) Canada/US (peer reviewed)	Examined effect of extended drinking hours from 1am to 2am on positive BAC driver traffic fatalities in Ontario on alcohol and non-alcohol-related traffic crash driver fatalities. Total		

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