It's time to Raise the Minimum Legal Drinking Age to 21

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This report summarises the evidence for raising the Minimum Legal Drinking Age (MLDA) to 21 and describes the options for implementing such a change. The reasons for raising the MLDA are outlined and include: (1) rising rates of youth violent offending and alcohol related-harm; (2) scientific evidence that in the early twenties the brain is still developing and therefore vulnerable to damage through common patterns of youth alcohol use; (3) solutions such as taxation and regulation are not included in any major political party platform; and (4) support for this policy change has increased to 50.2% of Australians.

It's time to raise the Minimum Legal Drinking Age to 21

Recognising the strong scientific evidence for social and health benefits, the document that follows has been prepared to clarify the scientific evidence and to encourage public discussion of the options for restricting rights to purchase and use alcohol until age 21.

The Dalgarno Institute

The Dalgarno Institute is a community based coalition of individuals, community groups, and associations that hold the common vision of making the world a better place for woman, families and children by reducing the adverse impact of alcohol and drug use. The Institute continues the 150 year tradition of the Australian Temperance movement that made important historical contributions to developing Australia's public health and women's rights movements. Australians are exposed to heavy investment from vested-interests that profit from marketing alcohol. The Institute is one of few public forums that continues to promote the scientific and social benefits of abstinence.

Proposal that the Minimum Legal Drinking Age be raised to 21

While rates of youth violent offending and alcohol related-harm continue to rise in all Australian States, solutions such as taxation and regulation are not included in any major political party platform. Given this situation and recognising the strong scientific evidence for social and health benefits (summarised below), the Dalgarno Institute calls on all Australian governments to amend relevant state liquor licensing regulations to restrict full rights to purchase and use alcohol until age 21 years. There are a range of policy options that are available to achieve a Minimum Legal Drinking Age (MLDA) of 21. As one option the Federal government could follow the example of the USA in 1986 and make Federal road funding conditional on States increasing the MLDA to age 21. Alternatively any State or Territory can act unilaterally to amend State Liquor Licensing regulations or to introduce one or more of the following restrictions from age 18 until age 21:

- Restricting the amount and or the types of alcoholic products that can be purchased by youth as occurs in a number of Scandinavian countries
- Extending the restrictions on secondary supply that many states have implemented (e.g., requiring that young people purchase their own alcohol to ensure they monitor their use)
- Extending regulation and enforcement that occurs in many local government areas to restrict use in specific contexts such as in public spaces
- Restrictions on heavy alcohol use measured by blood alcohol content
- Limitations on rights to purchase and use alcohol conditional on prior alcohol offending

The present document has been prepared to clarify the scientific evidence and to encourage public discussion of the options for introducing a Minimum Legal Drinking Age (MLDA) of 21.

Scientific Evidence

Until the late 1960s the legal age for purchasing and using alcohol in licensed premises was 21 in all Australian states. Regulations were amended in the late 1960s and early 1970s within each state to lower the age for purchase and use down to age 18. A study evaluated the impact of these changes and found they were associated with an average 10% increase in road trauma for young people. [1]

The Minimum Legal Drinking Age (MLDA) has been the subject of political controversy over the past four decades and there have been a number of states in different nations that have either lowered the MLDA (as did Australian states in the late 1960s and early 1970s) or increased it. The effect of variation in the MLDA has been widely studied. More than 70 studies have examined the impact on road injury and deaths and other outcomes of either increasing or decreasing the MLDA. Several studies in the 1970s found that motor vehicle crashes increased significantly among teens when the MLDA was lowered [2]

Convinced of the evidence for public health benefits President Reagan supported legislation in 1986 that made Federal road funding conditional on US states introducing a standard age 21 MLDA. A review of 17 studies from the states that raised the MLDA to 21 estimated that underage crash involvements were reduced on average by 16%.[2] The evidence indicates that a higher MLDA is effective in reducing youth alcohol consumption and in preventing alcohol-related deaths and injuries among youth. When the MLDA has been lowered, road crashes, injury and deaths have increased, and when the MLDA is increased rates have declined [3]

A common argument among opponents of a higher MLDA is that, because many minors still drink and purchase alcohol, the policy doesn't work. The evidence shows, however, that although many youth still consume alcohol, they drink less and experience fewer alcohol-related injuries and deaths.[2,3] It is sometimes argued that increasing the MLDA in the USA has increased illicit drug use, but this is incorrect. Annual trends in national school surveys show that illicit drug use declined in the USA after the national implementation of the age 21 MLDA in the 1980s. In 1987, 56.6% of USA students in their final year of high school (year 12) reported they had previously used an illicit drug. Rates fell steadily in subsequent years reaching an historic low of 40.7% in 1992 and since then have risen slightly to 46.7% in 2009.[4] Lifetime alcohol use was 92.2% for year 12 students in 1987 and fell steadily to an historic low of 69.4% in 2012.[4] A cross-national comparison found that rates of substance use (either alcohol or illicit drug use) were twice as high for Australian compared to US children in 2002, with much of this effect explained by the substantially higher rates of alcohol use in Australian children.[5]

The benefits of increasing the MLDA to 21 are evident not just in road safety prior to age 21 but also in improved road safety after age 21 until age 25.[2,3] Recent neuro-imaging studies show that the human brain is still developing through to the mid-20s. Episodes of heavy alcohol use that are common amongst young adults have detrimental implications for healthy brain development.[6] Research shows that when the MLDA is increased to 21, people under age 21 drink less overall and continue to do so through their early twenties.[3] Decreasing the MLDA

below age 21 has also been shown to result in population increases in other alcohol-related harms including suicide [7] and youth crime.[8]

With most research on the effects of MLDA laws having been conducted in the United States in the 1980s, it is sometimes argued that the introduction of alternative policies such as random breath testing for alcohol impaired drivers has made MLDA policies redundant. However, recent evidence on the adverse crash effects of lowering MLDA in New Zealand suggests that the policy impacts are independent of alternative road safety policies. In New Zealand the MLDA was lowered from 20 to 18 in 1999. An analysis found that alcohol-involved crash injury rates increased between 12% and 50% for cohorts in the 15 to 19 age groups after the MLDA was lowered.[9] The effect of lowering the MLDA occurred despite the previous policy having been implemented with little or no enforcement. A range of studies show that the benefits of increasing the MLDA can be enhanced when strong enforcement is also implemented.

The National Drug Strategy Household Survey found that Australian support for raising the MLDA to 21 is growing strongly from 40.7% in 2004 to 50.2% in 2010. It is often considered that young voters in the 18 to 20 age range would oppose raising the MLDA to 21, however, such opposition is unlikely to be universal. Many young people are aware that the potential benefits for their age group includes a reduction in alcohol-related violence and injury and increased road safety. The Dalgarno Institute encourages public debate as a means of clarifying that there is overwhelming scientific evidence and strong public support that favours raising the MLDA to 21.

References
[1] Smith DI, & Burvill PW. (1986) Effect on traffic safety of lowering the drinking age in three Australian states. Journal of Drug Issues. 16, pp. 183–98.

[2] Shults RA, Elder RW, Sleet DA, Nichols JL, Alao MO, Carande-Kulis VG, Zaza S, Sosin DM, and Thompson RS. (2001) Reviews of evidence regarding interventions to reduce alcohol-impaired driving. American Journal of Preventative Medicine. 21(4 suppl 1): 66–88.

[3] Wagenaar AC. Minimum drinking age and alcohol availability to youth: Issues and research needs. In: Hilton ME, Bloss G, eds. Economics and the Prevention of Alcohol-Related Problems. National Institute on Alcohol Abuse and Alcoholism (NIAAA) Research Monograph No. 25, NIH Pub. No. 93-3513. Bethesda, MD: NIAAA; 1993:175-200.)

[4] Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2013). Monitoring the Future national survey results on drug use, 1975–2012: Volume I, Secondary school students (NIH Publication No. 10-7584). Bethesda, MD: National Institute on Drug Abuse.

[5] Toumbourou, J.W., Hemphill, S.A., McMorris, B.J., Catalano, R.F., & Patton, G.C. (2009) Alcohol use and related-harms in school students in the United States and Australia. Health Promotion International. 24(4), 373-82.

[6] White AM, & Swartzwelder HS. (2004) Hippocampal function during adolescence: a unique target of ethanol effects. Annals of the New York Academy of Sciences, vol. 1021, pp. 206-20.

[7] Birckmayer J, Hemenway D. (1999) Minimum-age drinking laws and youth suicide, 1970–1990. American Journal of Public Health. 89, 1365–1368.

[8] Smith DI, Burvill PW. (1987) Effect on juvenile crime of lowering the drinking age in three Australian states. Br J Addict. 82:181–188.

[9] Kypri, K., Voas, R.B., Langley, J.D., Stephenson, S.C.R., Begg, D.J., Tippetts, A.S., & Davie, G.S. (2006) American Journal of Public Health. 96(1), 126 – 131.