If You Think Alcohol Consumption is Not Harmful, Think Again! (Part 2)

Ronald S. Laura, DPhil

School of Education, Faculty of Education and Arts, The University of Newcastle, Callaghan NSW 2308, Australia

INTRODUCTION

Ironically, when family and friends announce that one of their female members or a partnered couple is pregnant, the first thing that happens is that someone in a privileged position proposes that each member of the group fills a glass with champagne, or some fine wine that has been tabled, and lifts the glass high, with well-intentioned joyous praise for the happy couple. This scenario is in essence a commentary on a deeply embedded sociocultural tradition that is difficult to extirpate, as we shall see, even in the name of good health. Indeed, it is paradoxical that we toast the happy couple and their future offspring to good health, when what we nonchalantly pour into our glasses are the very alcoholic beverages which are among the most deleterious threats to a women’s health. Another problem is that such toasting-rituals extend far beyond the confines of wedding celebrations to a whole host of social events that have traditionally served to provide excuses for ‘ritualistic drinking’. For example, consider the fact that sporting competitions of many kinds, especially Elite Motorsport Car Competitions, end up with the successful drivers on the winners’ platform spraying and drenching each other with expensive Champagne. By reiterating these celebratory rituals, Motorsport Heroes in competitions across the globe implicitly legitimate such drinking behaviour, thereby encouraging their spectators to swallow as much liquor as they can as a vicarious way of celebrating these events. It is clear that we live in a society which laughs off educational advice about the problems alcohol causes not only to the drinkers themselves, but also to innocent adults and children who are infelicitously and all too often fatally impacted by someone else’s drunk driving.

A BRIEF SKETCH OF THE GLOBAL ALCOHOL PROBLEM

To illustrate briefly how massive the alcohol problem is worldwide consider that approximately 3.3 million deaths were attributable to alcohol-related events of a wide variety in 2016 such as deaths from alcohol-impaired driving, alcohol-related diseases, homicide, suicide, rape, and other criminal behaviour.1 Nearly 1.3 million people die in road crashes each year, on average 3,287 deaths a day. An additional 20-50 million people are injured or disabled. Globally, more than half of all road traffic deaths occur amongst young adults ages 15-44.1 In 2015 road crashes were the leading cause of death amongst young people ages 15-29, and the second leading cause of death worldwide was amongst young children whose ages range from 5-14.1

Each year nearly 400,000 people under 25 die on the world’s roads, on average over 1,000 a day. It was estimated in 2015 that road crashes cost USD $518 billion globally, and in the same year have cost low and middle-income countries USD $65 billion annually, exceeding the total amount received in the developmental assistance received by all these countries combined.2 Now that we have an idea of the problem of alcohol at the International level, let us now consider the seriousness of America’s National Hangover.

ALCOHOL USE DISORDER (AUD) IN THE UNITED STATES: EXPLORING THE PROBLEMS

Problem drinking that becomes deleterious is given medical diagnosis which is now known as “alcohol use disorder” or AUD.3 AUD is regarded as a chronic relapsing brain disease characterised by compulsive alcohol use, loss of control over alcohol intake, and negatively emotional
states of behaviour when alcohol is withheld by others from the person with AUD, or the person with AUD endeavours to deny himself or herself of alcohol for any of a number of reasons, including therapy. In 2015, an estimated 16 million people in the United States were afflicted with AUD. Approximately 6.2 percent or 15.1 million adults in the United States ages 18 and older were also identified as having AUD. This includes 9.8 million men and 5.3 million women. Adolescents can be diagnosed with AUD as well, and in 2015, an estimated 623,000 adolescents ages 12-17 had AUD.

The abuse of alcohol (AUD) has led to a panoply of alcohol related medical and other events such as road accidents which have cost the United States 249 billion dollars. It is estimated that AUD, resulting in large part from preventible drinking binges has been responsible for three quarters of the total cost of that 249 billion dollars. In 2012 it was reported that 5.1 percent of the burden of alcohol-related disease and injury worldwide amounted to 139 million disability-adjusted life-years. In 2014 the World Health Organisation (WHO) reported that alcohol consumption contributed to more than 200 diseases and injury-related health conditions, including a number of different cancers, liver cirrhosis, renal dysfunction and injuries from accidents, falls, and fights, to name only a few. According to the 2015 National Survey on Drug Use and Health (NSDUH), 5.1 million adults, aged 12 to 20 (13.4 percent of males, closely followed by 13.3 of females) have suffered from binge drinking leading to AUD. Of this number, approximately 1.3 million adults in 2015 received protracted medical treatment for AUD, carried out at myriad specialised alcohol rehabilitation facilities across America. This figure included 898,000 men, and 417,000 women, all of whom (by way of their doctors, families and friends) had come to the realisation that their inavertate drinking was sabotaging not just their health, but their lives, and the lives of others. The magnitude of the numbers canvassed here indicates that AUD is a far more serious problem than the American public has yet come to understand.

AUD AND THE GROWING PROBLEM OF ADOLESCENT FEMALE ALCOHOL ABUSE

According to the 2015 NSDUH, an estimated 623,000 adolescents between the ages of 12-17 have afflicted themselves with AUD. Although we observed above that of the 15.1 million adults with AUD, men outnumbered women by 481 thousand, indicating that the generational propensity of these females favoured light drinking, rather than heavy drinking leading to intoxication. However, amongst adolescents in the 12-17 age group, the ratio is reversed. The statistics show that in 2015 the number of adolescent girls with AUD reached 325,000, compared to 298,000 males also suffering from AUD. If we extrapolate from these current figures and project the comparative ratio of adolescent male and female drinking behaviour into their eventual shift into the 18 and over category, the number of female drinkers is likely to exceed the number of male drinkers significantly.

Let us now summarise the finer details of the role played in US road fatalities played alcohol-related accidents:

1) Recent data provided by the US National Safety Council estimates that in 2014 there were 32,675 people who died on American roads in motor vehicle accidents. Of this number 9,967 deaths were identified as having been caused by alcohol-impaired drivers. In 2015 it is reckoned that 1.1 million drivers in the US were arrested for alcohol-impaired driving, 16% of whom were under the influence of narcotics, while the total number of road deaths from car accidents in the same year increased to 35,092. Of that number it has been recorded that 10,265 people died in alcohol-impaired driving crashes, accounting for nearly one-third (29%) of all traffic-related deaths in the United States. The US National Safety Council recently published statistics showing that in 2016 the number of road deaths increased yet again to 40,200 fatalities. This represents an increase of 6% more road deaths than was witnessed in the previous calculation of road accident mortality rates in 2015, and a rise of 14 percent more, when compared to the census mortality rates recorded in 2014. It has been calculated that in 2014 in the US, 88,000 men and women died from alcohol-related causes. This being so, alcohol proved to be the fourth leading preventable cause of death that year in the US amongst those males and females in the age group of 15-49 years.

2) Given that the statistics from 2015 betray that females from 12 to 17 now have considerably more AUD problematic episodes than do men, and since nearly three years have passed since the 2015 survey, there is a greater risk that more women may be needlessly deceased or seriously injured in road accidents in 2017 than are men. As more of the AUD females take to the road, the statistics reveal that more men are endeavouring to escape from it. The motto here is ‘if you want a serious drink, you had better have a first think’. Our roads are dangerous enough without increasing the number of AUD drivers.

3) It is estimated that there were more women in 2016 driving on US roads than there were men. During the course of 2012, road registry offices across the US revealed that more women have driver’s licenses than do men. Having ascertained in 2012 that there are now more females with AUD from the ages of 12-17 than men, and that presently more women are licensed for driving than are men, it is likely that more AUD women who were once under age to drive, will progressively become old enough to acquire a driver’s licence, and take to the roads.
It is salutary to remind ourselves that as observed above, the number of total road deaths has increased in 2015 and 2016. According to The National Safety Council, along with the 38,300 people who were killed in 2015, it is estimated that another 4.4 million people were injured on US roads. As was made explicit earlier, in 2016 the US witnessed a rise in motor vehicle deaths to 40,200, thus up 6% from the 2015 figures, and up 14% from the 2014 fatality statistics. The collateral damage associated with these 40,200 fatalities, however, led to an estimated cost of property damage, and personal injuries and disabilities of $432.5 billion, a total which exceeds the 2914 figures by a staggering 14%. It is incontestable that drink driving is still a major problem. Women need to be alert to the fact that although men have more road fatalities than women, more women are involved in considerably more crashes than are men. In a study of US road accidents undertaken by researchers at the University of Michigan, it was shown that of the 6.5 million car accidents between 1998 and 2007, women drivers were involved in 68.1% of these, compared to only 31.9% of men. Given that men drove 60% of the time, while women drove only 40% of the overall road time, it is surprising that women had so many more accidents and injuries than men, despite the fact that men were driving on the roads 20% more than women. In short more men died on US roads during this period than women, but women had more accidents and were injured more than men.

My next editorial will examine the effect of alcohol on the brain with regard to the loss of female inhibition.

REFERENCES

1. Sacks JJ, Gonzales KR, Bouchery EE, et al. 2010 national and state costs of excessive alcohol consumption. *Am J Prev Med*. 2015; 49(5): e73-e79. doi: 10.1016/j.amepre.2015.05.031

2. World Health Organisation (WHO). Global status report on alcohol and health. PXIV. 2014. Web site. http://apps.who.int/iris/bitstream/10665/112736/1/9789240692763_eng.pdf. Accessed September 3, 2017.

3. Substance Abuse and Mental Health Services Administration (SAMHSA). 2015 National Survey on Drug Use and Health (NSDUH). Table 2.46B—Alcohol Use, Binge Alcohol Use, and Heavy Alcohol Use in Past Month among Persons Aged 12 or Older, by Demographic Characteristics: Percentages, 2014 and 2015. Web site. https://www.samhsa.gov/data/sites/default/files/NSDUH-DetTabs-2015/NSDUH-DetTabs-2015.htm#tab2-46b. Accessed September 3, 2017.

4. Centers for Disease Control and Prevention (CDC). Alcohol and Public Health: Alcohol-Related Disease Impact (ARDI). Average for United States 2006–2010 alcohol-attributable deaths due to excessive alcohol use. Web site. https://nccd.cdc.gov/DPH_ARDI/Default/Report.aspx. Accessed September 3, 2017.

5. Mokdad AH, Marks JS, Stroup DF, Gerberding JL. Actual causes of death in the United States 2000. [Published erratum in *JAMA*. 293(3): 293-294, 298]. *JAMA*. 2004; 291(10): 1238-1245. doi: 10.1001/jama.291.10.1238

6. World Health Organization (WHO). Alcohol. 2015. Web site. http://www.who.int/mediacentre/factsheets/fs349/en/. Accessed September 3, 2017.

7. Substance Abuse and Mental Health Services Administration (SAMHSA). 2015 National Survey on Drug Use and Health (NSDUH). Table 5.5A—Substance Use Disorder in Past Year among Persons Aged 12 to 17, by Demographic Characteristics: Numbers in Thousands, 2014 and 2015. Web site. https://www.samhsa.gov/data/sites/default/files/NSDUH-DetTabs-2015/NSDUH-DetTabs-2015.htm#tab5-5a. Accessed September 3, 2017.

8. Substance Abuse and Mental Health Services Administration (SAMHSA). 2015 National Survey on Drug Use and Health (NSDUH). Table 5.5B—Substance Use Disorder in Past Year among Persons Aged 12 to 17, by Demographic Characteristics: Percentages, 2014 and 2015. Web site. https://www.samhsa.gov/data/sites/default/files/NSDUH-DetTabs-2015/NSDUH-DetTabs-2015.htm#tab5-5b. Accessed September 3, 2017.

9. National Center for Statistics and Analysis. 2014 Crash Data Key Findings (Traffic Safety Facts Crash Stats. Report No. DOT HS 812 219). Washington, DC: National Highway Traffic Safety Administration, 2015. Web site. https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812219. Accessed September 3, 2017.

10. Substance Abuse and Mental Health Services Administration (SAMHSA). 2015 National Survey on Drug Use and Health (NSDUH). Table 2.19B—Alcohol Use in Lifetime, Past Year, and Past Month, by Detailed Age Category: Percentages, 2014 and 2015. Web site. https://www.samhsa.gov/data/sites/default/files/NSDUH-DetTabs-2015/NSDUH-DetTabs-2015/NSDUH-DetTabs-2015.htm#tab2-19b. Accessed September 3, 2017.
11. Substance Abuse and Mental Health Services Administration (SAMHSA). 2015 National Survey on Drug Use and Health (NSDUH). Table 2.83B—Alcohol Use, Binge Alcohol Use, and Heavy Alcohol Use in Past Month among Persons Aged 12 to 20, by Demographic Characteristics: Percentages, 2014 and 2015. Web site. https://www.samhsa.gov/data/sites/default/files/NSDUH-DetTabs-2015/NSDUH-DetTabs-2015/NSDUH-DetTabs-2015.htm#tab2-83b. Accessed September 3, 2017.

12. Substance Abuse and Mental Health Services Administration (SAMHSA). 2015 Key Substance Use and Mental Health Indicators in the United States: Results from the 2015 National Survey on Drug Use and Health. Figure 24. Web site. https://www.samhsa.gov/data/sites/default/files/NSDUH-FFR1-2015/NSDUH-FFR1-2015/NSDUH-FFR1-2015.htm#fig24. Accessed September 3, 2017.

13. Yoon YH, Chen CM. Surveillance Report #105: Liver Cirrhosis Mortality in the United States: National, State, and Regional Trends, 2000-2013. Bethesda, MD, USA: National Institute on Alcohol Abuse and Alcoholism (NIAAA), 2016. Web site. http://pubs.niaaa.nih.gov/publications/Surveillance105/Cirr13.pdf. Accessed September 3, 2017.

14. US National Safety Council, Motor Vehicle Fatality Estimates, 2016. Web site. http://www.nsc.org/NewsDocuments/2017/12-month-estimates.pdf. Accessed September 3, 2017.

15. Sivak M. Analysis of US Road Accidents between 1998 and 2007. Research Report. MI 48109, USA: University of Michigan; 2007.