Enlightened New Alcohol Research Symposium report

19 November 2018, Royal College of Physicians of Edinburgh
On behalf of Scottish Health Action on Alcohol Problems (SHAAP) and the Scottish Alcohol Research Network (SARN), we were delighted to welcome PhD and early-career researchers to our second Symposium in the Royal College of Physicians of Edinburgh. This event was held as a satellite event of the 8th European Alcohol Policy Conference (8EAPC). This report summarises key themes from the presentations by six researchers at varying time-points within their academic journeys. Important research is being undertaken in many institutions and we recommit to supporting this and its input to policy discussions.

Our grateful thanks to Dr Lisa Scholin, Ben Butterworth and Paulo Nunes de Moura for helping to organise this event and to Professor Carol Emslie of Glasgow Caledonian University for chairing the session.

All pictures by Malcolm Cochrane Photography, except picture of Prof. Aisha Holloway (below) and picture of the RCPE (back cover). Document design by Pippa Philips.
Alcohol and the Global Burden of Disease: Moving beyond the J-Shaped Curve

Max G Griswold, RAND corporation

Abstract provided by the presenter
Our recent study re-evaluated the last 30 years of alcohol epidemiological research. We did this using data from 592 studies on the relationship between alcohol use and 23 health conditions, along with 694 surveys on alcohol consumption, and data on alcohol sales. With this data, we estimated the prevalence and amount of drinking in 195 countries, for ages between 15 & 100, for both sexes, as well as the risk of alcohol use on these health conditions. Our research indicates that previous focus on “J-shaped” outcomes was misguided and that overall health loss occurs as soon as you start drinking.

Summary of the talk
Max Griswold explained that while there has been a great deal of research into the association of alcohol on disease and mortality, including other meta-analyses, he remained sceptical of the overall conclusions. He took issue with the existing body of research in this field (looking at studies from the 1980s to 2016) for three main reasons.

The first was the lack of precision in the measurement of the volume of alcohol consumed in many of the meta-analyses he examined. For example, a margin of 2-8 drinks per day was treated the same as a margin of 4-6 drinks per day. This resulted in a skewing of results which in some cases made it unclear whether or not alcohol had a harmful or protective effect on certain diseases. The second issue that Griswold identified with existing meta-analyses was problems with making standard reference categories for measuring a person’s level of drinking. While he noted that modern meta-analyses have for the most part rectified this issue, it is still a problem in a large amount of the research which exists. For example, non-drinkers were being treated the same as light drinkers, and in some cases non-drinkers included both people who had never consumed alcohol with people who used to be heavy drinkers but now abstained. This resulted in the phenomena of “comparing apples to oranges, instead of apples to apples” which also may have skewed results. The third and final issue that Griswold sought to address pertained to alcohol’s effect on mortality. Many of the historical analyses showed that alcohol use between 2-4 standard drinks daily had a protective effect. Griswold’s assessment of these studies is that they were not effectively portraying the association between death and drinking since so many causes of death which are wholly unrelated to drinking were being included. In taking all three of these issues into consideration for this modern meta-analysis, Griswold’s results showed some striking differences. He found consistently that even a small amount of alcohol is associated with worsening health outcomes.
Have you ever got drunk to make yourself feel better, or drink to forget? Many people drink more after experiencing trauma, with different theories suggesting that people drink to either cope with painful memories or forget traumatic events. This is important, as painful memories are among the most severe symptoms of trauma. However, it is unknown how getting drunk after experiencing a traumatic event influences our memories, despite many people using alcohol more after trauma. This PhD explores the relationship between post-traumatic alcohol use and traumatic memories aiming to inform the treatment and prevention of PTSD and problem drinking.

Benjamin Butterworth opened his talk with a definition of trauma and followed with an explanation of the current research climate surrounding alcohol use and traumatic memories, particularly as they relate to post-traumatic stress disorder (PTSD). Part of PTSD, explains Butterworth, are the intrusion of traumatic memories in day to day life. These memories, along with being highly distressing and disorienting, are also problematic in that they are often not fully formed. Trauma often leaves an individual only with very specific details imprinted, leaving many of the other aspects of the incident unclear. This means that what the victim does remember may be very striking, but they are unable to place it in context. Alcohol complicates this matter even further: While there is some research surrounding what the effects of alcohol might be on memory when the trauma in question takes place while the victim is intoxicated, there is very little research on what might happen when alcohol is used subsequent to the incident. Butterworth believes this is a key piece of the puzzle, as victims of PTSD often report using alcohol in a variety of ways: to help them forget trauma, as a coping mechanism, as a numbing effect, etc.

Butterworth’s research has two elements: The first draws on his background in experimental psychology. He will be bringing participants who have experienced a traumatic event in their past and dividing them into two groups. The first group will be given two alcoholic beverages while the second will get placebo beverages. The experiment will then measure what the effect of alcohol was on the memory of the participants. For the second element of Butterworth's research, he plans to conduct qualitative interviews with individuals in the Glasgow area who have been affected by a traumatic event. These individuals will be asked to talk about their relationship with alcohol, and asked how they think their alcohol use affects their memory. Furthermore, they will be asked about what their beliefs and knowledge about memory are, another unresearched area according to Butterworth. He hopes that this PhD will help to create more understanding of what the relationship between alcohol and memory is, and ultimately that it will inform better practice with regards to assisting individuals suffering from PTSD.
Abstract provided by the presenter
In Ireland, a new multi-component pilot programme known as REACT (Responding to Excessive Alcohol Consumption in Third-level) was launched in 2015 aimed at reducing hazardous drinking among college students. The theme of this PhD research is evaluation of the REACT programme. Research includes examining the implementation and potential outcomes of this programme. A protocol paper has also been compiled, which sets out the approach used for developing, implementing and evaluating the REACT programme. The EAPC presentation will include an overview of REACT, along with a summary of some of the findings from the research to date.

Summary of the talk
Susan Calnan’s research is focussed around the evaluation and implementation of Ireland’s REACT programme (Responding to Excessive Alcohol Consumption in Third-level). REACT is a suite of action points that institutions are required to take on in order to address what is considered Ireland’s most pressing public health issue for universities and colleges: hazardous alcohol consumption. Research suggests that up to two-thirds of students show signs of harmful drinking and that the gender gap for alcohol consumption is narrowing. REACT takes its place within the wider policy context of Ireland which has seen introduction of a number of regulatory measures through the Public Health Alcohol Bill. Development of the program took place in three stages: A systematic review of existing measures, a knowledge exchange forum with students and administrators and finally expert consultation. Institutions running the programme are required to create a dedicated steering committee which includes students and senior staff who sign a memorandum of understanding. Further mandatory tasks include an alcohol consumption survey and feedback to the participants aiming at encouraging them to think about their drinking behaviour. The survey is then repeated two years later in an attempt to identify changes in attitudes and consumption levels. She has examined the policy context, implementation, outcome measurement and student perception of the project. Her findings have uncovered a number of challenges: Some institutions lack the resources to drive and implement the programme, some found that there was a lack of clarity, others wishes to tailor the program to their own needs.

Calnan also explained that there was contention surrounding the decision not to include drugs. In terms of the students perceptions, the first interviews had been completed and analysed at the time of this talk, whereas the result of the follow-ups had not yet been released. So far, the findings revealed that two thirds of students were drinking at a harmful level and of these, the majority were not aware that their levels were harmful. Their perceptions of the REACT program itself were positive for the most part, though some questioned the effectiveness of it. Interestingly to Calnan, many students opined that the individual is responsible for their own drinking behaviour, as opposed to pointing to broader circumstances. She also pointed to the fact that while students tended not to be as interested in the issue from a health perspective, they were receptive to arguments about the financial burden of alcohol.
Context
- Policy focus = abstinence
- Risk varies:
  - Alcohol
  - Other factors
- Women’s perspectives
Alcohol marketing and young people in the UK: Where are we at?

Nathan Critchlow, University of Stirling

Abstract provided by the presenter

This paper presents data from the Youth Alcohol Policy Survey, a cross-sectional survey with 11-19 year olds in the UK (n=3,399). The findings show that young people, above and below the legal purchasing age, are aware of alcohol marketing through a range of channels. Eighty-two per cent had seen alcohol marketing through at least one channel in the past month and 17% owned alcohol branded merchandise. The results also show that marketing awareness was associated with increased alcohol consumption and greater likelihood of higher-risk consumption in current drinkers. In never drinkers, ownership of branded merchandise was associated with greater susceptibility.

Summary of the talk

Nathan Critchlow’s research aims to address the following questions: How much alcohol marketing do young people see, and how might this affect their knowledge, attitude and behaviour? Marketing is an essential method that the alcohol industry uses to influence consumers and drive up sales. The importance of marketing is highlighted by the fact that alcohol producers spending millions of pounds per year on it. Critchlow clarified that marketing is not only advertising, but that there are four important elements, the Four Ps: Product, Price, Place and Promotion. He includes advertising as a component of promotion. There is a complex and sophisticated network of mass-media advertising, including television, social media, billboards, sponsorships which all play a role in marketing. He explained that while there is evidence that advertising is associated with consumption and initiation, the industry is still allowed to self-regulate, which he suggested is an approach that simply cannot work, likening the situation to a fox guarding the henhouse. He also spoke about how there have been no important developments in policy in this area, due to unresolved issues, including gaps in the evidence which is also dated.

In this context, Critchlow explained, the survey aimed at filling the gaps and providing a new baseline understanding of young people and alcohol marketing in the UK. This was an online survey conducted with young people aged between 11 and 19, the average age of which was 15, meaning that they were mostly people who could not buy alcohol and therefore should not have been exposed to marketing. The researchers, he continued, recorded the amount of alcohol marketing that the participants had seen in the previous month, whether they owned any type of alcohol brand merchandise, as well as alcohol consumption or future intention to consume in the next year. Critchlow explained that the findings included data showing that almost half of the participants had seen advertising through television, or special offers, that 39% had seen advertising through celebrity endorsement, 31% through sponsorship, and 27% through social media. He said that the researchers did not see any difference in these results when it came to factoring in location, deprivation levels or ethnicity, and this, he suggested, shows that marketing exposure works at population level, and is not reduced to specific groups. He also explained that the data showed that young people above and below the purchase age had been exposed to a wide range of alcohol marketing, and that exposure is associated with consumption, including high risk drinking and intention to start drinking.
Seeking women’s views on pregnancy and alcohol

Annie Taylor, Edinburgh Napier University

Abstract provided by the presenter
This is a qualitative, exploratory, feminist, longitudinal, photo-elicitation study, which uses a social model of alcohol consumption to examine the ways in which women who drink (or drank) during pregnancy account for this. It aims to explore the social contexts of women’s lives, including gender, socio economic status, life histories, and partners. It is anticipated that these aspects of women’s lives will intersect in complex, context-dependent, and fluid ways. The study uses two interviews and a photo elicitation task, to explore this with each participant, which offers participants time and space to reflect on and develop their own views throughout the research process.

Summary of the talk
Annie Taylor’s talk focussed on the rationale and methodology of her ongoing research into women’s experience with alcohol during pregnancy. Her talk opened with an explanation of the aims and the context of the project, highlighting that alcohol use during pregnancy is a highly contentious and sensitive issue. As such, there is very little research which explores women's experience of alcohol use during pregnancy, and virtually none for those who drink at high risk level (35 UK alcohol units per week). Furthermore, none of the existing research in this field is from the UK. Taylor therefore aims to explore the social model of women’s drinking during pregnancy in order to understand more about this issue in a UK context. The current policy context in the UK and much of Europe is to advise women to abstain from drinking during pregnancy in order to mitigate the risk of Foetal Alcohol Spectrum Disorder (FASD). Taylor clarified however that evidence suggests that there are varying levels of risk of FASD depending on quantity of alcohol consumed. She also explained that there are other risk factors for FASD, such smoking, drug use and low socio-economic status. Those who drink at high risk levels during pregnancy are likely to have experienced poverty and social isolation.

Taylor is looking to recruit 30 women for her qualitative study, which will involve an initial semi-structured interview and a follow-up interview six months later. Her aim is to understand the women’s perspectives on what role alcohol plays in their lives, and how they would be different or the same without alcohol. Participants will also be given the option of expressing their views through a photo project whose meanings will be examined during the second interview, along with how their view of themselves and their circumstances may be evolving. Criteria for inclusion are women who are currently drinking during pregnancy, or who have done so within the last seven years. The threshold drinking level is 7 UK units of alcohol per week. This threshold has been kept deliberately low in order to account for the tendency to underreport alcohol consumption (particularly during pregnancy) and to ensure high enough numbers of participation.
Abstract provided by the presenter
An estimated 3% of the UK population are drinking at harmful levels or have some level of alcohol dependence. Whilst many recover without formal assistance, others seek treatment which can consist of pharmacotherapy and/or psychosocial support. Nalmefene, first approved for use in the UK in 2013, is one of a range of pharmacotherapies licensed for the treatment of alcohol dependence. This study aims to understand how Nalmefene has been used in the UK using anonymised data from Clinical Practice Research Datalink (CPRD). Patient records were examined to identify patient characteristics and details about the prescriptions received.

Summary of the talks
Clare Sharp introduced her talk with an overview of the drug Nalmefene and an overview of the controversy surrounding it. Nalmefene was approved in the UK in 2013, and its champions argue that it can benefit patients in a number of ways. It is a drug which aims to reduce drinking as opposed to eliminate it, which means that it can be a viable option for individuals who are not looking to practice total abstinence from alcohol, this making it a more widely usable drug. The drug is to be taken as needed by patients when they feel they may be at risk of wanting to drink. It is to be taken 1-2 hours before the period of risk. The drug could also be used by those whose drinking has not reached a point which so critical that they required treatment. On the other side however, critics of Nalmefene argue that the evidence of the effectiveness of the drug is weak at best. There had been multiple failures in clinical trials before the drug was approved in 2013. Furthermore, detractors pointed out that there was concern that the population that took the drug during trials would not necessarily resemble those who took it in the real world. Either way, according to Sharp, the drug represents a potential paradigm shift in the way that alcohol dependency is treated in the UK. Sharp’s work specifically addresses the issue raised by sceptics regarding the use of the drug in the real world vs. those who took it in the context of the clinical trials. Using Clinical Practice Research Datalink (CPRD), Sharp was able to make a comparison between patients who had been prescribed the drug between 2013 and 2017 and those who had participated in the clinical trial. Among her findings it can be seen that while in the clinical trial population average age was 44-52 years with 66-75% males, the real world population had an average age of 50 and was 58% male. While all participants in the clinical trial population had an alcohol dependence diagnosis, the second group only presented 43% of people with alcohol dependence. Finally, she also explained that all participants in the clinical trial population received psychosocial support along with the medicine, in the other group only 8% of patients received such support.