Ulster Medical Society

THE SIR THOMAS & LADY EDITH DIXON LECTURE
11th February 2010
'*Alcohol—The Good, the Bad and the Ugly*'
Professor Ian Gilmore
Royal Liverpool Hospital

**Professor Atkinson:**

Tonight is our Sir Thomas and Lady Edith Dixon lecture and I'd like to welcome you all to that special lecture, and perhaps I really don't know very much about the Dixons, and I'm sure that some people over tea afterwards will be able to educate us about the Dixons, but the Dixons I think owned a lot of land and property around York Street in Belfast, but they were very generous benefactors to Belfast. All of you probably, except Ian here, and he maybe does know about it, will know Dixon Park and the fact the family did bequeath that to Belfast, to the city council and Wilmont House and the grounds there. But one of the things that they did bequest as well, Sir Thomas and Lady Edith Dixon, was a sum of money to The Royal Victoria Hospital as a fund for a lecture, and this is one of the things. There hasn't been a Dixon lecture for a few years so we're very pleased that we've been able to start that again. I'm grateful to The Royal staff committee for their generosity in doing that, and we do remember the Dixons and their generosity tonight.

It's a great pleasure for me to welcome our special lecturer tonight, and that is Professor Ian Gilmore, who is a Consultant Gastroenterologist in The Royal Liverpool Hospital, he is shortly to become the president of the Liverpool Medical Institution, I think I've got that right, and he's taken over that. He has already [had a] very distinguished career and presently is just finishing his very successful term as President of The Royal College of Physicians of London, which he stepped into soon after he had some years again as a very successful registrar of the college. And that's where I first got to know Ian when we were dealing together with the Endocrinology and Diabetes Committee there. So it's a great pleasure to have Ian here, he's a very, very busy man and he is very active outside the college, and one of his interests as a gastroenterologist is alcohol and the title as you can see is very balanced, 'Alcohol, the Good, the Bad and the Ugly', and Ian is currently chairman of the Alcohol Health Alliance and he's also chair of the European Alcohol Health Forum Science Group, and I think you just have to go around a hospital ward on the day after an emergency taken to realise the impact of alcohol on medicine in 2010. So I think it's very timely that as we consider this year important issues in medicine that this is one of the lectures that we're having. So it's a great pleasure Ian to have you here, and a great pleasure for me to invite you to give this. Just to say as well, that we're even more honoured because Ian's coming here, giving the Dixon lecture and his wife is a Royal Victoria Hospital trained nurse, so in a way he's coming home tonight and his wife is already at home with some of her family. So thank you for coming to Belfast in the midst of your schedule, we're really looking forward to your talk.

**Professor Ian Gilmore:**

Thank you very much, Professor Atkinson, for that generous introduction and if you think that was stress coming up here two minutes late, I can say this, some other things have been stressful around the last few years. I haven't done my homework as well as I should about Sir Thomas and Lady Edith Dixon, but I suspect there was some linen in there somewhere, but perhaps I can be enlightened at teatime afterwards. So as Brew said we're going to talk, not just about the good, not just about the bad, but also about the, unfortunately, sometimes ugly side of alcohol. This is going to be a cytokine-free zone for the next 40 minutes or so, and I hope that won't disappoint the scientists among you. So when you become president of The Royal College of Physicians they send you on a media course and you're told that you have to tell people in advance what you're going to tell them, you then tell it to them and finally you tell them at the end what you've just told them. It takes three times as long but it's educationally correct. So I'm going to tell you a little bit about how much we drink, how we drink, the patterns that we drink in, the health impact, the argument [over] the health benefits versus the risks, what is driving the culture we seem to have today, and how are our governments meeting these challenges.

Just to put it in a world context if you like, this is a map of the consumption in the world and the heaviest drinking at 15 to 25 litres per person per year, you can see is really Russia and Eastern Europe, that's the drinking capital of the world. But the next group, 12 to 15, you can see that the UK and Europe are right in there, and overall Europe is the highest consuming part of the world. Now I don't actually believe this map because I've been to places, for example like Sri Lanka, where whole rural areas are decimated because the man are lying around the whole time drinking the local distilled spirits and the woman do all the work. No change there then you might say. But I think these figures for the developing world are grossly inaccurate, and indeed when I was in Sri Lanka I was given this slide, this man is actually floating down the river on barrels of this kasippu, which is the locally distilled spirit made of coconut, and that never gets into the official statistics. This is the map done according to scale, the countries own the size of the consumption, and you'll see this is the bloated UK and Ireland drawn proportionate to the amount that is consumed. So this is how we've been drinking over the last century, you can see actually we were drinking more at the turn of the 20th century, this is split up into different constituents, the spirits etc. and you'll see that there was a mark fall in both world

wars in our per capita consumption, a rather drastic step to reduce our national consumption. But this particular drop here in the First World War was when they brought in the licensing hours, when they started closing the pubs in the afternoons because munition workers who were putting together the bombs and shells were coming in a little worse for wear before putting the delicate wiring together.

You see that beer consumption has stayed fairly steady since the Second World War, risen a little bit, but the big rise has been in wine and also in spirits. If you break that down there's been a big increase in some of the things like particularly vodka and cider is the new kid on the block, and I was rather depressed to hear that Magners cider is outselling Guinness in Ireland now—a sad state of affairs. This is the per capita consumption in the major European countries, and you see we are actually, the UK is just around the middle, but you see this is broken down into recorded and unrecorded consumption. It's very difficult to get a handle on the unrecorded consumption in the UK we've no idea how much comes in in those white vans and Volvos that are nearly trailing along the ground as they come over from Calais, and also we know that the heaviest drinking periods of people's lives is when they're on holiday. People are said to drink within a fortnight's holiday in Spain probably the equivalent of what they drink in three months at home, so again, these figures are undoubtedly underestimates.

Actually, consumption levels are fairly stable across Europe but as I say, the highest consumption in the world, and there seems to be a sort of convergence. In France they're now drinking less and we have caught up with them, and it's perhaps not surprising as we're now, you know, so close to Europe that we are converging. But underage drinking is a big problem in many European countries now, drink-driving, and binge drinking. It used to be said that you know, the French children would sip wine with their parents but now they're eschewing wine with their parents and going out and getting legless on vodka and ready-made Bacardi Breezers and things. So again, there's a harmonisation across Europe and it's not surprising because Tuborg is not a Danish drink, it's an international drink, Guinness is international. These are all global brands now, and the same applies to the spirits, they're global brands drunk all over Europe, all over the world.

But are there some differences in, do we drink differently to the rest of Europe? And there are still some differences. This looks complicated but it's just the European countries on the left-hand side and the percent of the population, and if you drink mainly or solely with meals then you are blue or red, if you drink solely or mainly away from meals you are green and yellow. So you'll see Italy, Portugal, nearly all the drinking is done with meals. You go to Ireland, Netherlands, UK; you'll see the vast majority of drinking is done away from meals. And that has big implications on the absorption of alcohol, how quickly it absorbs, the effect it has on the body, whether you're taking with food or not. And if you talk about binge drinking, binge drinking is a very difficult term to define; I define it roughly speaking as drinking to get drunk. But here, five pints of beer or a bottle of wine, or five shots of spirits, is called a binge, and they say what percentage of binging events per year does the average adult have, and you see that we're in the 25 or more per year in the UK, it's just UK and Finland are top of the European binging league. And as you go further south in Europe it's much more the tippling with meals, further north you go it tends to be much more binging on an empty stomach. This is another way of putting it, this is the European binging league, the percentage of those who admit to drinking the equivalent of more than a bottle of wine in one session at least once a month over the past year. You see 60% of men in the UK and 34% of women fall into this category, top of the European league. I'm afraid our youngsters are no better; you talk to 15- to 16-year-olds, have they had five or more drinks on any one occasion three times in the last month, and you see more than 20% of youths, 15 to 16 in this country, have done that more than three times in the last month. What about abstainers, how do we do for not drinking? Well these figures are for male in the light purple, dark purple for females, you'll see that the UK in the … if I can at the bottom there, we are relatively low on abstainers in the UK compared to some countries, particularly Muslim countries like Turkey, very high number of abstainers. If you look carefully you'll see they found one man in Greece who didn't drink.

Actually abstinence rates in the UK are rising. Between 1980 and 2001 the percentage of men and women abstaining increased, at the same time our per capita consumption increased. So fewer people are drinking more for the rest of us, and I'd like to put this down to the Salvation Army or my proselytising, but I suspect it's more related to the changing ethnic mix in the UK, more people not drinking for religious reasons. Women—drinking to unwind after a stressful day. Of those women who are drinking above recommended limits, more than 80 % said they did so to relieve stress, and women, it's rather like smoking, where they caught up with men after the Second World War, I'm afraid women are catching up with men now when it comes to alcohol. Why? I don't think there's any single answer, but we know that young people in work are more likely to drink, binge drink, because they've got a higher disposal income and I'm sure that this ladette culture is driving it and I think women are working harder and playing harder, they're holding their own in the workplace and therefore why shouldn't they away from the workplace too. But overall we have to be frank, women still drink less than men, almost right across the age scale. The particularly worrying thing is the young women starting to drink and there is some evidence that young girls of 15 to 21 use alcohol more than men to gain confidence before going out for a social occasion, to

increase their self-esteem and confidence. And also I think advertising is getting much more subtle now and much more aimed towards sophisticated people and towards women. Who's doing the drinking? Well I'm afraid the managerial and professional, of which I put most of you in that category, both the men and women are actually drinking as much, or in women's case, more, than those lower down the social economic scale. On average, routine and manual workers are drinking less now than the so-called upper social classes.

So there's the paradox, alcohol is very much part of our culture, it loosens social occasions, it's hard to conceive of a social occasion now without alcohol, and it has benefits in the social context. But then we have this sight that is so common on our streets on a Saturday night, and I apologise for the camera shake but if you were taking that picture in Liverpool on a Saturday night I bet your hand would have been shaking too. So there are two sides to alcohol in our culture; this is a front cover from The Spectator 'Relax, have a drink', and then this is the BMJ a few weeks later, 'Britain on the rocks', and all the mayhem for the companies binge drinking in our society. Homer had it right, 'To alcohol, the cause of, and solution to, all of life's problems'. But alcohol is good for you. I call this curve the physicians friend because doctors very much like to hang onto this curve, which plots your relative risk of death on the vertical axis, against your consumption in units per week. And these are two separate studies, but basically these are men and these are women, and you see if the relative risk from death is one for non-drinkers, you'll see people that drink around ten units a week have a significantly reduced overall mortality compared to teetotallers. For men this effect is more sustained with increased drinking whereas women the curve does not stay below one for so long. This is still the topic of huge debate. There is a rationale for it through changes in HDL cholesterol from alcohol, it does improve the lipid balance, but there's also still real concern that this may be an artefact that the teetotallers, the people who don't drink, are not drinking because of ill health or because of some previous problems with alcohol. So it may be artefactual, but I like to be generous and say there probably is some beneficial effect, that's the good news.

The bad news is it's very age-related. Now most of you here are probably alright. But if we look at men, for men in the age group of 16 to 24, 25 to 35, there is no depression of the curb below the line, there is no health benefit from consumption, it's only when you get up to 35, 45 plus that this beneficial effect kicks in, and I'm afraid the women, the news is worse, for women the benefit doesn't really kick in at all until you reach the 55 plus age group. So there is no benefit in young people and the risks of alcohol—-trauma, and so on—vastly outweigh the potential benefits. If you break up that J shaped curve, it's exactly the same curve, relative risk of death against consumption but each bar represents a different disease. The benefits are all in ischaemic heart disease. All the other causes, cancers, hypertension related conditions etc., there's a fairly linear increase in risk with consumption. So the benefits, if there are benefits, and there probably are, are in the prevention of ischaemic heart disease. So for atherosclerosis, there is evidence that alcohol is probably good for you. But there are other cardiac diseases, and I'm afraid when it comes to arrhythmias, holiday heart, people call it holiday heart because people who go off, drink more on their holidays and go into atrial fibrillation, they talk about hypertension, cardiomyopathies, coronary artery tone bad, and for sudden death, alcohol, I'll show you, it's very bad.

This is a fascinating study from Scandinavia where they took a group of men who all drank the same amount a week. They were beer drinkers predominately and the open bars, they never drank more than two bottles on any one occasion. They were regular drinkers but never more than two bottles. But the solid black bars were the bingers, who used to take the same amount a week, but they took it in six or more bottles at any one time, and the intermediate group. And you see that the all-cause mortality was three times higher in those who took their beer in binges, and it was mainly death from external sources, having car crashes or being shot by jealous husbands, or whatever, but notice that fatal myocardial infarction was six times higher in the bingers. There's something about bingeing that is not good for your heart; it may be mediated through acute lipid changes, it may be mediated through platelets becoming stickier, but there's something that is not good for you, and I personally know of two people who have dropped dead while trying to run off a heavy night the night before at a conference. So if you do have a heavy night, have a lie-in the next morning, don't try and run it off.

I'm not going to give you a medical lecture of all the various organs that can be affected adversely by alcohol, but being a liver specialist I will just mention cirrhosis. This is San Sebastian, the patron saint of the liver biopsy, although the way some of the other arrows are sited, others could perhaps lay claim to him. But this is a cirrhotic liver macroscopically and microscopically, and it was the chief medical officer in England who really drew attention in his 2001 report to the fact that deaths from cirrhosis were falling in continental Europe and they were rising in the UK. And for the jingoistic among you I can tell you the good news is the lines have now crossed, we now have a higher mortality rate than the continental and the EU average, for deaths from liver disease. And this was a follow-up study in The Lancet in 2006, spread over 50 years, again showing in Europe this marked fall in men and a similar, lesser fall in women, but if you look at England and Wales in red, Scotland in green, you can see that we are bucking the trend in Europe in a pretty major way. If you put those into

figures over a decade, and these are the figures for young people but it's the same for older people, 15 to 44, a more than doubling of the death rate in men [in] England and Wales. Ireland increasing, France, Spain, Italy, where consumption is falling the mortality is falling, and the same pattern in women. If you look at movements in mortality over the last 30 years you can see that these are the relative changes. You see that for diabetics, for cancer, respiratory, stroke, by and large we're getting better, people are living longer, but the one disease that is bucking that trend is liver disease. It's now the fifth commonest cause of death, and alcohol is responsible for about three quarters of liver related deaths.

So liver stands out, and the reason is alcohol harm is behind it. Just to give you some figures that are relevant here, these are alcohol related deaths, and you can see how Scotland stands out like a sore thumb, but second is Northern Ireland and the England and Wales coming up behind them. And these are data in fact from the Republic of Ireland, but it'll be very similar in other parts of Great Britain and Ireland. All-cause mortality is falling, people are living longer, people are healthier longer, but as the per capita consumption rose over a decade, about 40%, all the alcohol related causes of death rose too. So again, while overall we're doing better in this country, we're not doing better as far as the demon drink is concerned, and internationally, not just in the UK, but worldwide, alcohol is up there in the top three-quarters of premature preventable death, with smoking and hypertension. And this just shows disability-adjusted life years, about 7% of disability-adjusted life years are lost in men, internationally from alcohol, about 5% for women.

Brew mentioned the problems of a take-day in our average hospital and here, for men and women, are the hospital admissions rising year-on-year in England, and they're about to exceed one million admissions a year. These aren't A & E attendances, these are actually being admitted to hospital with an alcohol related cause. And it's true right across the regions of England; North East, North West are top of the league, but this is year-on-year there's an increase in all our regions and one wonders where this is going to stop.

Something that was really influential in getting smoking banned in public places was this idea of passive smoking, of absorbing someone else's smoke, but in fact the harm done from passive drinking, although it's a rather curious phrase, is probably higher. If you think about things like the effect on families, the effect on children, the effect on the NHS, the effect on domestic violence etc, foetal alcohol syndrome, I think perhaps not enough has been made of the damage to third parties, and I think there are very few families that haven't been touched in some way by someone in the family who has had problems with alcohol dependence or physical disease caused by alcohol. And certainly domestic violence, I think, one suspects these figures of around 50% overall are probably an underestimate of the impact that alcohol as a causal factor in domestic violence.

I'd just like to draw attention to the new kid on the block, well it's new kid as far as I was concerned, but it was in the papers recently, I don't know if people know about Buckie?—but it was absolutely remarkable that in Scotland £50,000 a day passed over the counter for this 15% tonic wine that is stuffed full of caffeine, and it makes up 54% of what the authorities call dangerous litter, which is presumably broken bottles of Buckfast, and it's been named in 5,000 crimes in the last three years, whether it's crimes that have been people hit over the head with a bottle of Buckie or sprained their wrist hitting someone else over the head, I'm not sure of the details, but you will know that it's these Benedictine monks in Devon who [originally] manufactured this wine[1] and at the moment are denying any responsibility for the consequences.

This is probably the most important single slide, because it shows the deprivation index on the horizontal axis and the death rate from alcohol on the vertical axis, and it shows that, although I showed you that the rich drink as much as the poor, the harm is all seen in the most deprived of the population. So alcohol is a huge health inequalities factor. There's something about being poor and drinking heavily that is not good for you. My beds are not full of accountants and doctors; they're full of single mothers at the bottom end of the social scale. And so the 18th century moralists who said that drink is the curse of the working classes actually got it right. Also Oscar Wilde parodied this to say that work was the curse of the drinking classes, and I think you'd agree with that too. This is to remind me I'm half way through, or a little bit more than half way through, and it's the only bit of science I'll show you. This was actually published in the Canadian Mental Association journal showing the relationship because nodding off episodes and the length of a lecture to remind me not to good on too long.

So why has the burden of health damage increased so much in the UK? And I'll talk about some of the evidence based factors of the relative price, the availability and the increase in promotion of alcohol products that we're seeing. This was a report produced by The Academy of Medical Sciences and Sir Michael Marmot, who has just produced a big report today on health inequalities, was the chairman, and also I know that correlation does not prove causality, but we were so struck by the clear inverse relationship between price and consumption over the last 40 years that it was put on the cover, and I think there is very good evidence that that is the causal relationship between price and consumption. This is, to put it another way, the steeper the curve, the higher it goes, the cheaper alcohol is—it's a relative affordability over

[1] https://en.wikipedia.org/wiki/Buckfast_Tonic_Wine

the last 20 years. But this is the on-license, this is the price of something in a pub and this is the price in the supermarkets, the off-license. So the big change in affordability has been in off-licenses. A pint of beer is a little bit cheaper in relative terms than it was 20 years ago, 25 years ago, but the big change, a massive change, is affordability of off-sales beer and off-sales wine. And if you look at the consumption you'll see the trends to home drinking and beer over this 20 odd year period, it was ten to one pints of beer drunk in pubs versus home in 1971, by 2003 it was very nearly 50/50, and I bet it's more than 50/50 now. And the peak of beer sales that coincide with the Soccer World Cup are just phenomenal, and that is the time of course the supermarkets are particularly selling it cheaper than water. And we know that about five pubs a day in the UK are actually closing down, and I don't want to see that and I believe that pubs do have a useful social function, particularly in less urban and rural areas, and so it's this heavy discounting in supermarkets that is driving this trend.

We had a natural experiment in Finland in 2004. Their neighbour Estonia was coming into the European Union and they thought there would just be cheap booze coming over the border so why not just cut the tax anyway? They cut it by 33% and there was an immediate 17% increase in sudden deaths and the deaths from cirrhosis and so on followed after. There's been mayhem in the streets of Helsinki ever since they slashed the price of alcohol.

It's been calculated in the UK; a fairly modest rise in alcohol, about 10% would actually cut deaths from cirrhosis, nearly 10%, and would actually reduce deaths directly caused by alcohol by about a third. So it's not a linear relationship between consumption and harm, the curve rises very steeply, and later on in the curve, so only a modest reduction in our per capita consumption can have really quite big health benefits. This was a bottle of vodka on sale in Asda, selling for three pence less than the duty, so the bottle and the contents came for minus 3p. Whisky was more expensive, you had to pay 60p for the whisky after the tax, but of course that doesn't take account of all the transport costs and the retail costs. So there's doubt there is below cost selling going on.

Don't worry about the detail of this slide but it's somebody sat in front of a television for a few weeks, recording when the alcohol adverts came. So this is midnight to midnight, and notice the peak for beer and spirits advertising on the television comes between four and six pm. The peak for wine comes much later, nine, ten o'clock in the evening. Who's watching between four and six? Are you all home watching? Or is it your children? And there's now clear evidence that alcohol advertising increases both the age which youngsters start drinking and the amount that they do drink when they start. We don't know the magnitude of the effect, but certainly the effect is there significantly. And it isn't just about advertising, there's a whole web of marketing, whether it's free samples, product placement, packaging, product design, media know how, etc. etc. and really I think sponsorship and the internet are I think the biggest rising ways of marketing alcohol at the moment. The second biggest sports sponsors in the UK, they've filled that vacuum that was left by the cigarette companies moving out, and I'm ashamed to say that my own football team, that didn't do well last night against Arsenal, are responsible for having the logo right across their chests. And it isn't just what the message is, it's who giving it, the credibility that comes from sportsmen carrying these logos and youngsters buying the shirts. This was a card given to me by a taxi driver, another example of social responsibility. It was a company called Not Drunk Enough, would give the taxi driver £2.50 if they took their customer there on the way home, if they weren't drunk enough.

I took this picture myself on the Bakerloo Line, I was wondering who sold strong lager to this man still in his pyjamas, jaundiced, a Venflon in his hand, who I think had staggered out of The Royal Free Hospital, picked up a can of lager at the store opposite the hospital and, certainly from my own experience, we have a supermarket exactly opposite our hospital and when the patients with ascites and jaundice are strong enough to get out of bed, they walk over the road in their pyjamas and they are served. That is corporate social responsibility.

What's the government been doing? Well the English government in 2004 produced an article on harm reduction strategy that depending on voluntary partnerships with the drinks industry, education and public information and cross working between agencies. What voluntary partners is the drink industry, I'll say more about that in a minute; perhaps education and public information, certainly the public have a right to know of the risks of various potential harms; but there's very good evidence, on their own, education and public information are very poor at altering behaviour, and cross working through an agency means losing responsibility between different parts of government. The mandatory code is just coming out at the moment. The home secretary Alan Johnson pointing towards his quote, which said "We've consulted extensively with the public and the alcohol industry to ensure that these conditions will only target the most irresponsible practices, that most people agreed should not happen anywhere", I'm not sure about the fairly irresponsible practices or the quite irresponsible, but it particularly specifies the dentist chair, where people lie with their mouths open and someone will, a nice lady with a short skirt will come and force drink into your mouth, they're going to ban that, but not the less irresponsible practices.

The international evidence is irrefutable that price is the biggest single driver and there are various ways that you can tackle price, you could increase alcohol duty, and the chancellor at the last budget did that. The problem with that is unless you put a huge

hike on tax the supermarkets will absorb it and just put the price on something else and continue to use alcohol to attract people into the store. You could try and link taxation to the strength of the alcohol, but we there have our hands tied by Brussels where for some obscure reason you cannot tax 8.4% cider any more than you tax 1% cider, you can't tax 15% wine any more than 5% wine, says Brussels. Minimum pricing I'll say a bit more about, and you could also bring in policies that specifically target promotions.

In nearly all the provinces in Canada, they've had a thing called social reference pricing for a while, which is in effect a form of minimum price for beer, and that's proved quite successful in reducing consumption. In the UK the Department of Health commissioned a study from the University of Sheffield looking at the impact of price on consumption, and this is the percentage reduction in consumption that would come from setting a minimum price of alcohol at 20p, 30p, 40p, 50p. If you can see that the more you increase the minimum unit price the most the effect on consumption. You can drive consumption down by about 15 to 20% and that would produce savings of thousands of lives. If you took the total discount ban, it isn't very effective on its own, it's an equivalent to a minimum unit price of about 40p. So minimum unit price seems to be the most effective, and the nice thing about minimum unit price is it doesn't affect the price of a pint of beer in a pub, it doesn't affect the price of a glass of wine in a restaurant, it doesn't affect the price of a half decent bottle of wine in Tesco's, but it will stop the 8.4% cider three litres for £2.99 and it will hit the selling vodka for less than duty.

And the other good thing about minimum unit price is it actually targets the people you want to target, because heavy drinkers buy 15 times more alcohol than moderate drinkers, and they spend ten times as much, and there's that discrepancy because they prefer cheap drink, and heavy drinkers pay 40% less per litre of pure alcohol than moderate drinkers. So any price policy will hit heavy drinkers more than moderate drinkers, and minimum pricing also affects young under-age drinkers more than over-age drinkers. And the chief medical officer in his reports in 2008 picked out minimum unit price is something that should be done and calculated that a 50p minimum unit price would save about 3,500 deaths a year, about 100,000 hospital admissions, cut crime, loss of work from sickness and a total saving over ten years of about 15 billion pounds.

At the moment neither political party in England, neither the main ones will sign up to it, but the Lib Dems support minimum unit price in England. Unfortunately they don't support it in Scotland, because the Lib Dems tend to have their seats where there are distilleries, and the distilleries make vodka as well as whisky. I was delighted with the Health Committee at the House of Commons recent thoughts on alcohol, where they were concerned that the government were too close to and being influenced more by the drinks industry than they were by the Royal College of Physicians or the Chief Medical Officer. We would agree. We're not calling for total temperance, total abstention, we don't want to return to the prohibition of the 1920's, 30's, and I certainly wouldn't like to fall into the hands of the ladies on the right of the slide. But what we are calling for is a range of evidence based policies that will reduce alcohol harm and that must include getting our per capita consumption to fall through tackling price and availability.

What has it got to do with us? Why should we get involved in this issue? Well, the word profession means to speak out and I personally believe that we have a responsibility to speak out on this and other public health topics. There are plenty of public health topics to pick from at the moment, not just smoking, not just alcohol, not just obesity, global health and indeed climate change, which I think is something that is, we have responsibility to highlight the impact of climate change on health, and in fact tie up the two talks. Alcohol contributes about 1.5% to our total greenhouse gas emission in the UK and most of that in fact, a lot of that, comes from transport, and this is just wine, but actually if you were to drink French wine rather than Australian wine, rather than Chilean wine, you would be reducing your carbon footprint very considerably. It is the transport of the wine from Australia and from Chile that adds greatly to our carbon footprint.

I'm showing this because today Sir Michael Marmot has produced a report for the prime minster on how to reduce health inequalities in the UK and it's just over, well it's exactly 20 years since Sir Douglas Black produced this iconic report, which was commissioned by the Labour government in 1979, by the time it was published there was a Conservative government, the Conservative government printed it over an August bank holiday, they printed 150 copies, and that's one that we've still got in The Royal College of Physicians. And there was a foreword from the Minister of Health to say that they did not accept the document, and for the first ten years or so in power they did not acknowledge there was such a thing as health inequalities. And it was Rudolf Virchow in fact who said the physicians are the natural attorneys of the poor, and social problems fall to a large extent within their jurisdiction, again, exhorting us to stand up and talk about these issues. And why should we, why should the Ulster Medical Society, get involved? Well I think medical organisations are seen as independent, they're seen as authorities of the public, we're still the most trusted profession in the country and we have [?] with our own physicians. So I think we can do things bringing others together to try to highlight some of these problems that are facing us as a society.

So to finish, alcohol is not all bad, this is a shop in Liverpool that sells wine that is particularly good for you, but if we don't get it right we may have to do

what they do in Market Hill, where they have an economy of scale and they put the wines and spirit merchants together with the funeral services. Thank you.

**Professor Atkinson:**

Thank you very much for a very informative talk, I'm sure they'll be lots of questions so who's going to start?

**Audience member:**

In giving advice, for the professions to give advice to government or to whoever would give advice, if there's a risk we could put too much emphasis on the minimum price, minimum price must be looked into, but there are three things I can think of which people frequently forget about, would not even think about. What has been mentioned has been the … there's the … let me see, the outlets for one thing There's been a trend, in the few years since supermarkets have been selling the thing, but people go out not intending to buy alcohol, buy a small amount, are encouraged to buy even more at certain outlets. I think that has been an unfortunate trend [?].

Another important thing is the pattern [?] that has been ongoing for the past eight years since the licensing hours were extended as far as they had been, after all drinking patterns aren't the same as in Southern Europe. For one thing there's the cold weather, there may be racial differences etc, but the impact, there are many factors for me, it's dangerous to be simplistic but I don't think we need to have any doubt that the … in the late hours people tumbling out at three or four in the morning out of licensed premises, but that is any less bad than tumbling out at 11:30 pm.

**Professor Atkinson:**

Very interesting point.

**Audience member:**

But if you've ever gone to buy recently, if you've ever gone to buy recently [?] glasses of wine, you will not get the small size of wine glasses that you used to, you'll get much larger ones.

**Professor Atkinson:**

Thank you very much.

**Professor Gilmore:**

They're all excellent points and I didn't mean to imply there was just one solution, but I think what's important is not to let government off the hook and say this is a matter of personal choice. It's not personal choice when you're peddling at something that's potentially addictive and when it's being marketed 24/7. But you're absolutely right, the first point is crucial. Just there was not enough time to talk about everything, but most civilised countries keep alcohol in a separate area in supermarkets, they're already doing that in, they're already doing that in Ireland, they're already doing it in Scotland, I think, I'm not sure about Northern Ireland I'm ashamed to say, I think they do in … but in England there's a special offer at the end of every aisle and you're going to get your bread and coffee and oh, £2.99, on offer, why not. So you're absolutely right, segregating hours, the government is thinking of reducing to 24 to 21. I think it's quite hard to put the genie back in the bottle but that is something certainly, but we need a range of methods and government has, is doing something under the mandatory code about glass sizes, they are going to require small glasses to be available as well as large, and water, free water should be available for people to drink in bars. So absolutely, a range is needed.

**Audience member:**

Thank you very much, I really enjoyed that. Now, I'm surprised that you didn't mention the name of Jellinek so does it mean anything to you?

**Professor Gilmore:**

Jellinek?

**Audience member:**

Jellinek. Whenever we were talking about alcohol in the sixties and training our medical students Jellinek had an interest of cirrhosis of the liver, a subject not lacking in interest to yourself, and he produced very, very clear evidence to, he studied Europe basically and the United Kingdom, that the availability of outlets and the time availability was directly in proportion to the incidence of death from cirrhosis of the liver. Now nobody has talked about this chap, I think we've forgotten about him. But I mean this is very, very interesting, a very valid research done about 80 to 100 years ago, I can't quite remember when he wrote.

**Professor Gilmore:**

Again, a very good point, time didn't allow, I've got several slides on the impact of availability, when they started selling wine in grocery stores in New Zealand the consumption rose about 18 to 20%; when they started selling beer in grocery stores in, I think it was Norway or Sweden, again a big increase. Availability is certainly a big factor and I think it's criminal that petrol stations sell alcohol, and are sending out a very funny message. So you're absolutely right, Jellinek and others have shown that availability is a key driver.

**Professor Atkinson:**

Quite a few hands up and we'll get to you all. I'm very interested in the younger people here tonight, who are often coping with this medically—have any of you any thoughts or comments of what you might suggest to Professor Gilmore that he might take back to the alliance to discuss? Don't be shy, because we really want the input …

**Professor Gilmore:**

The obstetrics, I mean foetal alcohol syndrome, I mean, the gross foetal alcohol syndrome that's described in Skid Row alcoholics in the States, it isn't very common, but there's increasing evidence that the more minor forms of exposure to alcohol in utero may be responsible for some of these hyperactivity and attention disorders in young children, and certainly there's increasing evidence of brain development goes on right through teenage years into the early 20's, and that binging you know, in teens, may not be good for the brain.

**Professor Atkinson:**

Professor Hayes?

**Professor Randall Hayes:**

About 15 years ago we did an audit in our general medical unit, looking at the alcohol consumption across all the population. The average in males was 40 units per week, the average in females was 20 units per week, but per capita consumption doesn't really tell you the truth, because 50% of our population were teetotal, and I think this is the problem with per capita figures, that it may give you a false indication …

**Professor Gilmore:**

It does. Yeah, you're absolutely right, I mean again, time didn't allow doing that, but that is the likely cause of the difference between social classes drinking on average but the harm in the poor because I think most professional people drink a bit, whereas if you go down to social economic classes one and two, there are quite a lot of teetotallers, you know, little old ladies that don't drink at all, but those who are drinking are drinking a lot more.

**Professor Hayes:**

What was also, what also struck us was that really only a minority of those drinkers had an alcohol related disease, they were in for something else. Then another observation, another experiment, which was done here in the 1870s where there was an aggressive temperance movement and also the price of alcohol increased, and in the Sperrins they took up ether drinking, and Ernest Hart who was the editor of the BMJ about 1900, he did a [?] epidemiological study where he traced ether from where it was manufactured in Lancashire by ferry and by train to Cookstown, and 15 tons were coming into Cookstown station every year. So you can put up the price and you can educate, but people will find alternatives.

**Professor Atkinson:**

An interesting, can I just sort of follow-on then, I was going to ask you about, my understanding was that a lot of the temperance movements started at the time of the gin palaces, where alcohol was very cheap, and women particularly were affected and their families were affected. Do you think that temperance, not particularly the temperance movement, but do you think it will come again? Do you think that you know, if, you know, I enjoy a glass of wine, hopefully not too much, but if I was starting over again, would I start to have any? So that's another one for you, do you think that's going to happen?

**Professor Gilmore:**

It's very hard to predict, all I know is that in the present environment it seems unlikely, I think the movements in the United States, you know 'keep your virginity', you know, until you're 21 and so on, by and large have not had great results, and I think encouraging people not to drink at all I suspect in the present environment would have a similar result, certainly in England. You know, church attendances are at all-time lows, it's a very, this society does not seem ready for that. But I was interested in the ether drinking, you say people have ways of getting round things, I was abroad with a meeting and a lady from the Sun phoned me up and said is it dangerous to snort vodka up your nose? And I said well, it doesn't sound very healthy. She said well, could it kill you? And I said well I don't know if it went down the wrong way or, it probably could kill you. And I thought no more until the headline in the Sun was 'Top doc says Prince Harry will die!' and a picture of Prince Harry snorting vodka.

**Audience member:**

Some years ago, the government I think was trying to pass the buck and say that alcohol and alcoholism is a medical problem, whereas clearly from what you're saying it's not. It does seem that there's a certain amount of resistance from the government to control drink, is this because of, is it because from where they draw the support or is it being directed from Brussels or what, why do you think the government is not listening any more?

**Professor Gilmore:**

Very complex. Undoubtedly business interests are incredibly strong, every time the Department of Health tries to do something tough around alcohol, Mandelson, the Business Minister, tries to stop it. Huge tensions within government between departments over the whole issue. So I think it's mainly worry about loss of revenue, loss of tax, driving industry out, industry have got a very powerful, powerful voice. So I suspect that's what the main thing behind it.

But I think there's been a huge change in the last two years, two years ago the treasury wouldn't even consider price was a factor, now all the major parties accept it is a factor, the only discussion is how best to tackle it. And it isn't the only thing, I don't want to sit here and say we've only got one tune of our violin, but it is the thing that is most clearly driving this most … and it isn't just about binge drinking, kids on a Saturday night, there's an awful lot of people who take the

cork out at home with a bottle of wine and never quite get it in again, you know, later in the evening. So, and women are, you know, are the new kids on the block. But it's important to say that not everyone who drinks heavily gets liver disease, only about 30% of heavy drinkers, and there's, there's almost certainly genetic predisposition, there's a strong genetic predisposition to alcohol dependence, so some people are dealt bad genes and there's a continuing controversy about what are safe limits. And you know, I get constantly grilled on Women's Hour about you know, why is it 14 units for women and 21 for men, and the thunderbolt won't come down if a woman has an extra drink one week, or two extra drinks, all we can say is below that limit you're unlikely to suffer physical, mental or social harm. If you go above it, you might, you might not, the risks are not linear, the heavier you are the risks begin to rise exponentially. But some people get away with, and everybody knows someone who's smoked 40 Woodbine a day and drank eight pints and lives to 94, but that's, you know, that's statistics for you.

**Professor Atkinson:**

I think that's been really, really interesting, and I think we're all very grateful to Professor Gilmore for putting it so well for us, thank you very much again.