Should alcohol limits for men and women really be the same?

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The UK’s new alcohol guidelines advise that men and women shouldn’t drink more than 14 units of alcohol a week. Previous advice for the British drinker presented a higher threshold for men, so this represents a considerable change. So what was the evidence that the limits should not take gender into account?

Most countries that provide guidelines on alcohol consumption suggest higher threshold levels for men than women. It is well known that, physiologically, women are more vulnerable to the toxic effects of alcohol than men. Pint for pint, women have a greater risk of alcohol related problems such as dependency, certain cancers (liver, mouth and stomach) and other physical and psychological health issues.

A complex interplay of genetics, environment, personality and motivation contributes towards the likelihood of experiencing these conditions. The different risk factors faced by men and women are particularly apparent at higher levels of consumption – what we now call “drinking with increasing risk”. That is, men who regularly drink more than three or four units a day and women who regularly drink more than two or three units a day. But at levels of consumption lower than this, these differences are not as clear cut.
An acceptable risk

The latest guidelines are based on data provided by the University of Sheffield. It shows that anyone who drinks every day and who consumes no more than 14 units of alcohol a week has a less than one percent chance of dying from an alcohol-related health condition at any time.

One percent was adopted by the guidelines committee as the maximum level of risk that would be acceptable to the public. This has been presented as a similar level of risk to the chance of dying in a car accident. (In fact, the chances of dying in a road accident are even smaller – at less than 0.5% over a lifetime.) But most people don’t drink every day and so, for the majority, the situation is a little less clear cut.

So it’s not just how much, but also how often, we drink that counts, with decreasing frequency associated with increased risk. The Sheffield data shows that men drinking 14 units a week on a single occasion have a 4.5% lifetime risk of dying from an alcohol-related health condition. For women drinking at the same level on a single occasion each week, the risk is 2%.

Interestingly, at the new guideline threshold, men have an almost five times (0.99%) greater risk of death than women (0.18%), but still less than 1% overall. If we consider the previous threshold of 21 units a week for men drinking seven days a week, the risk of alcohol-related death increases to 3%. Complicated, isn’t it?

The new guidelines present the message that there is no “safe” level of alcohol consumption but stop short of recommending abstention as the best policy. In fact, the Sheffield data shows that for both men and women drinking up to seven units a week, spread across three or more days, actually has a protective effect on death from an alcohol-related health condition. For men the benefit is very small (a 0.1% improvement), compared with over 2% for women.

A better way to present the data

Given that there are well established and significant differences between male and female responses to alcohol across a range of quantities and frequencies of consumption, it is difficult if not impossible to encompass this diversity into a single recommendation of what represents the optimal limits of consumption with regard to the likelihood of dying from an alcohol related condition.

It might be better to present information on the relative risks associated with increasing use.
This allows a comparison with non-drinkers, for example: “Men who regularly drink five units a day have a threefold increased risk of death from cirrhosis of the liver compared with non-drinkers.” In fact, the expert committee that helped to put the guidelines together noted that this might have been a better way to illustrate the relationship between drinking and death.

The situation is complex. Although it’s clear that there are benefits to both health and society by reducing alcohol consumption, the reasoning behind the cut-off of 1%, as an acceptable level of risk, or the underlying assumption that those who drink do so on a daily basis, is unclear.

While the guidelines set out to provide helpful advice about drinking, ignoring the differences between male and female responses to alcohol, is a risky strategy. If the guidelines don’t resonate with those of us who choose to drink, they will simply be ignored, and that won’t do anyone any good at all.