How should we talk about alcohol and risk?

“The overall absolute increase in cancer risk for one bottle of wine per week equals that of five (men) or ten cigarettes per week (women).” This was the headline finding of a study led by Theresa Hydes (University of Southampton, UK) recently published in *BMC Public Health*, which aimed to directly compare the carcinogenic risk of alcohol consumption with that of smoking cigarettes. The study, subtitled “how many cigarettes are there in a bottle of wine?”, proved divisive, with some commentators labelling it unhelpful, and others calling it innovative and important. The analysis, and the mixed manner in which it was received, offers an insight into an ongoing conversation about the population-level health risks of alcohol consumption, and how best to communicate them.

Hydes and colleagues took the overall lifetime risk of cancer in the general population, based on Cancer Research UK (CRUK) data, and subtracted the alcohol-attributable fraction for all known alcohol-related cancers, and the tobacco-attributable fraction for all known smoking-related cancers, to estimate the lifetime risk of cancer in alcohol-abstaining never smokers. This was then multiplied by the relative risk of drinking either 10 or 30 units of alcohol per day compared with non-drinkers and those who drank more. Based on these studies, the notion that a couple of glasses of wine or beer per day were beneficial was spread widely—and in some cases gleefully—in the media. However, the new study used Mendelian randomisation to analyse genetic data on over 160 000 Chinese participants followed up for 10 years. When adjusting for genotype, the researchers found that the U-shaped association between alcohol and stroke disappeared, leading them to conclude that alcohol consumption uniformly increases blood pressure and stroke risk, and that there is no protective effect of low levels of alcohol consumption.

Without doubt, the clarity and accuracy of public health messaging on alcohol lags behind that for tobacco and other drugs. Despite its shortcomings, many of which are acknowledged by the authors, the analysis by Hydes and colleagues offers a novel way of communicating the risks of alcohol consumption to the public. By comparing drinking with smoking, they leverage the hard-won successes of anti-tobacco campaigners in creating a deep public awareness of the links between cigarettes and cancer. Whether or not it has the desired effect on public awareness and drinking behaviours, any effort to innovate the way we talk about alcohol and risk should be applauded. ■ *The Lancet Gastroenterology & Hepatology*