

Alcohol and blood pressure

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Executive summary

- The focus of this report is alcohol's neglected role as a contributing cause of hypertension, itself the leading cause of heart disease, stroke, type 2 diabetes and dementia.
- Alcohol's causal role in hypertension is supported by (i) physiological research considering effects on the heart and blood vessels (ii) epidemiological research describing associations over time between alcohol use, blood pressure and hypertension.
- High quality clinical and experimental studies show that alcohol intake increases blood pressure, especially in the hours and days after consumption and for higher levels of consumption.
- High quality epidemiological studies show alcohol intake aggravates mechanisms that lead to hypertension, such as inelasticity and thickness of arteries. Such effects are most evident with the common patterns of binge drinking, whether occasional or regular.
- High quality studies with randomization find no evidence that low level alcohol use has beneficial effects on blood pressure or hypertension. Mendelian randomisation studies compare outcomes for people with and without genetic intolerance to alcohol and so minimize confounding and reverse causation. These find strong positive relationships between alcohol use and blood pressure, with no protection from low or moderate levels of consumption.
- Observational studies also find consistent evidence of alcohol's negative impact on hypertension, especially for people with binge drinking.
- There is increasing scientific scepticism for the once widely held belief that low or moderate levels of consumption can provide protection from cardiovascular diseases. Biases in uncontrolled, observational studies can create the appearance of such protection. However, studies with stronger designs (e.g. with Mendelian randomisation) find only negative relationships between alcohol use and risk of ischaemic heart disease and stroke, for example.

- Recognition of alcohol's substantial causal role in the genesis of hypertension and related disease is belatedly being recognised in clinical guidelines for the management of high blood pressure.
- General guidelines on alcohol consumption and health have been lowered in many countries reflecting growing scepticism of health benefits and evidence of harm at even low levels of consumption.
- While screening and appropriate interventions for those identified with hazardous alcohol use may work in some cases, practitioners need more incentives, training, and specialist support for these to be implemented more widely and effectively.
- Alcohol is often neglected in primary prevention and is viewed by practitioners and their patients as less important than regular exercise, diet and not smoking for prevention of hypertension and other diseases.
- The most cost-effective means of reducing hypertension and related health harms in a population are policies which reduce overall population alcohol consumption.
- We therefore recommend governments introduce policies to reduce the affordability, availability and acceptability of alcohol to reduce consumption and improve health.
- We recommend that risks posed by alcohol consumption to elevated blood pressure and hypertension be highlighted in clinical guidelines, on alcohol warning labels and in primary care interventions.
- We recommend individuals reduce their consumption to no more than one Swedish standard drink per day on most days and avoid more than two drinks on a single occasion.

Read and download the full report:
alcoholandsociety.report/alcohol-and-blood-pressure/

