ALCOHOL USE: FUELING THE NCDs TSUNAMI

Alcohol-related cancers, CVDs, digestive diseases, diabetes, mental ill-health and solutions for change

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ALCOHOL USE: FUELING THE NCDs TSUNAMI

Alcohol is a major obstacle to sustainable development, adversely affecting 14 of 17 SDGs. Alcohol is a major risk factor for NCDs, including mental ill-health. There is a strong link between alcohol and NCDs, particularly cancer, cardiovascular disease, digestive diseases and diabetes, as well as mental ill-health.[2]

1,7 million

Alcohol consumption caused an estimated 1.7 million NCD deaths in 2016.[1] This equals: 4.3% of all NCD deaths and 65.5 million NCD DALYs*

*DALYs = Disability-Adjusted Life Year (DALY)[4]
One DALY can be thought of as one lost year of "healthy" life. The sum of these DALYs across the population, or the burden of disease, can be thought of as a measurement of the gap between current health status and an ideal health situation where the entire population lives to an advanced age, free of disease and disability.
DALYs for a disease or health condition are calculated as the sum of the Years of Life Lost (YLL) due to premature mortality in the population and the Years Lost due to Disability (YLD) for people living with the health condition or its consequences: DALY = YLL + YLD

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ALCOHOL AND CANCER

The International Agency for Research on Cancer (IARC) has determined that alcohol consumption is causally related to

1. Oral cavity
2. Oropharyngeal
3. Hypopharyngeal
4. Breast cancers,[1]
5. Oesophageal (squamous cell carcinoma)
6. Colon
7. Rectal
8. Laryngeal
9. Liver and intrahepatic bile duct

No safe amount of alcohol

For cancer, there is no safe amount of alcohol use. The cancer risk increases steadily with greater volumes of alcohol consumption.[3]

Global, regional burden: alcohol and cancer

Globally, of the 9 million cancer deaths, an estimated 0.4 million were attributable to alcohol consumption, in 2016.

- This means 4.2% of all cancer deaths are attributable to alcohol.[1]

Alcohol was responsible for the largest proportion of cancer deaths in the European and Americas regions, where 6.2% and 4.6% respectively of all cancer deaths were attributable to alcohol consumption.[1]

The contribution of alcohol to cancer DALYs was highest in Europe and the Americas.[1]

- Europe: 6.6% of all cancer DALYs were attributable to alcohol consumption
- Americas: 4.8% of all cancer DALYs were attributable to alcohol consumption.

ALCOHOL AND CARDIOVASCULAR DISEASE

The WHO Global Alcohol Status Report 2018 shows that alcohol use is overwhelmingly detrimentally related to many cardiovascular outcomes, including hypertensive heart disease, haemorrhagic stroke, ischemic heart disease, cardiomyopathy and atrial fibrillation.[1]

When delineated by cause, alcohol had a net detrimental impact on

1. Haemorrhagic strokes (causing 9.5% and 9.6% of all haemorrhagic stroke deaths and DALYs respectively),
2. Hypertensive heart disease (causing 7.4% and 7.9% of all hypertension deaths and DALYs respectively),
3. Cardiomyopathy (causing 6.8% and 7.5% of all cardiomyopathy deaths and DALYs respectively) and
4. Ischaemic heart disease (causing 2.7% and 2.1% of all ischaemic heart disease deaths and DALYs respectively).

Landmark studies question alcohol's health benefits

A comprehensive study published in The Lancet (2019), shows alcohol itself directly increases blood pressure and the likelihood of stroke. Overall, the study found alcohol increases the stroke risk by ca. one-third for every four additional alcoholic drinks per day.
The study found no protective effects for low dose alcohol use.
For people who consume up to two alcoholic drinks a day — which would qualify as moderate or low dose alcohol use — scientists have found that they would have an increased stroke risk of about 10% to 15% when compared to people who live free from alcohol.[5]

The theory that a small amount of alcohol might be good for people has been thoroughly debunked by two landmark studies within one year.[6]

Global, regional burden: alcohol and CVDs

593 000

Globally, alcohol caused an estimated net CVD burden of 593 000 deaths. 3.3% of all CVD deaths and 13 million CVD DALYs (3.2% of all CVD DALYs) are caused by alcohol.[1]

The role of alcohol as a contributory cause of CVDs was highest in the European and African Region, in 2016.[1]

- Europe: alcohol was responsible for 10.5% of all CVD deaths and 11.0% of CVD DALYs
- Africa: alcohol was responsible for 2.2% of all CVD deaths and 2.5% of CVD DALYs

ALCOHOL AND DIGESTIVE DISEASES

Alcohol is causally related to an increase in the risk of both liver cirrhosis and pancreatitis causing an estimated 637 000 digestive disease deaths and 23.3 million digestive disease DALYs in 2016.[1]

- This represents 25.2% of deaths and 26.2% of DALYs within the burden of alcohol-attributable digestive diseases.
- Alcohol-attributable liver cirrhosis caused 607 000 deaths and 22.2 million DALYs
- Alcohol-attributable pancreatitis resulted in 30 000 deaths and 1.1 million DALYs

Global, regional burden: alcohol and digestive diseases

The age-standardized burden of alcohol-attributable digestive disease deaths was highest in Africa and the Western Pacific.[1]

- Africa: 16.9 deaths per 100 000 people
- Western Pacific: 10.8 deaths per 100 000 people

The age-standardized burden of alcohol-attributable digestive disease DALYs was highest in the African and South-East Asia regions.[1]

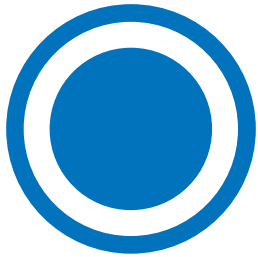
- Africa: 602 age-standardized digestive-disease DALYs were due to alcohol
- South-East Asia: 413 age-standardized digestive-disease DALYs were due to alcohol

ALCOHOL AND DIGESTIVE DISEASES

Liver Disease in focus

- Chronic liver diseases are a major and increasing cause of morbidity and mortality.[7]
- 283 million people aged 15+ years had an AUD[1] and are at risk of alcohol-associated liver disease.[9]
- Alcohol is strongly associated with various kinds of liver disease, with fatty liver, alcoholic hepatitis and cirrhosis being the most common.[2]

ALCOHOL AND DIABETES



Concerning alcohol and diabetes the situation is complicated. Meta-analysis have confirmed that there is a U-shaped relationship between the average amount of alcohol consumed per day and the risk of type 2 diabetes.[2]

- Chronic heavy alcohol use has been observed to disrupt glucose homeostasis and to lead to the development of insulin resistance, resulting in a higher risk of diabetes mellitus[1]

ALCOHOL AND MENTAL ILL-HEALTH

There are associations of alcohol use and alcohol use disorders (AUD) with almost every mental disorder, including depression, post-traumatic stress disorder (PTSD) and suicide.[2]

Global, regional burden: alcohol and mental ill-health

In 2016, an estimated 283 million people aged 15+ years had an AUD.[1]

- That equals 5.1% of all adults worldwide

The past 12-months prevalence of AUDs was the highest in the European Region and in the Region of the Americas.[1]

- Europe: 66.2 million people aged 15+ years, representing 8.8% of the population of that age group
- Americas: 63.3 million, representing 8.2% of the population aged 15 years and older

Alcohol dependence (the most severe form of AUD) occurred in 2.6% of people of aged 15+ years in 2016.[1]

- Americas: 4.1% prevalence of alcohol dependence
- Europe: 3.7% prevalence of alcohol dependence

SOLUTIONS

Alcohol policy best buys to prevent and reduce NCDs

The global NCDs epidemic can be reversed through implementation of evidence-based, cost-effective and high-impact public policy measures: among others the alcohol policy best buys*.

- **Increase excise taxes on alcoholic beverages**
- **Enact and enforce bans or comprehensive restrictions on exposure to alcohol advertising (across multiple types of media)**
- **Enact and enforce restrictions on the physical availability of retailed alcohol (via reduced hours of sale)**

Implementation of the alcohol policy best buys promises quick gains across the NCDs fueled by alcohol use.

$1 = $9

A $1 investment in the alcohol policy best buys yields a return of $9[11]

*Best Buys explainer
In May 2013 the World Health Assembly (WHA) endorsed WHO's Global Action Plan for the Prevention and Control of NCDs 2013–2020. Part of this plan comprises a menu of policy options and cost-effective and recommended interventions ("Appendix 3"). It has been updated and endorsed by the WHA in 2017 in line with new evidence.[9] An alcohol policy best buy is an intervention that is not only highly cost-effective but also cheap, feasible and culturally acceptable to implement. A highly cost-effective intervention is one that, on average, provides an extra year of healthy life (equivalent to averting one DALY) for less than the average annual income per person.[10]

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Movendi International is the premier global network for evidence - based policy solutions and community based interventions to prevent and reduce alcohol harm.

Development through alcohol prevention

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