Medical Xpress

Targets to reduce harmful alcohol use are likely to be missed as global alcohol intake increases

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Increasing rates of alcohol use suggest that the world is not on track to achieve targets against harmful alcohol use, according to a study of 189

countries' alcohol intake between 1990-2017 and estimated intake up to 2030, published in *The Lancet*.

As a result of increased alcohol consumption and population growth, the total volume of alcohol consumed globally per year has increased by 70% (from 20,999 million litres in 1990 to 35,676 million litres in 2017). Intake is growing in low- and middle-income countries, while the total volume of alcohol consumed in high-income countries has remained stable.

The estimates suggest that by 2030 half of all adults will drink alcohol, and almost a quarter (23%) will binge drink at least once a month.

Alcohol is a major risk factor for disease, and is causally linked to over 200 diseases, in particular non-communicable diseases and injuries.

"Our study provides a comprehensive overview of the changing landscape in global alcohol exposure. Before 1990, most alcohol was consumed in high-income countries, with the highest use levels recorded in Europe. However, this pattern has changed substantially, with large reductions across Eastern Europe and vast increases in several middle-income countries such as China, India, and Vietnam. This trend is forecast to continue up to 2030 when Europe is no longer predicted to have the highest level of alcohol use," says study author Jakob Manthey, TU Dresden, Germany.

He continues: "Based on our data, the WHO's aim of reducing the harmful use of alcohol by 10% by 2025 will not be reached globally. Instead, alcohol use will remain one of the leading risk factors for the burden of disease for the foreseeable future, and its impact will probably increase relative to other risk factors. Implementation of effective alcohol policies is warranted, especially in rapidly developing countries with growing rates of alcohol use."

Monitoring alcohol use is part of several international programmes, including the WHO's Global Action Plan for the Prevention and Control of NCDs 2013-2020, the UN's Sustainable Development Goals, and the WHO's Global Strategy to Reduce the Harmful Use of Alcohol. These targets are based on per capita alcohol consumption in adults (the number of litres of pure alcohol consumed per person aged 15 years or more in a year taking into account recorded and unrecorded use, and tourism).

The new study measured per capita alcohol consumption using data for 189 countries between 1990-2017 from the WHO and the Global Burden of Disease study. Over the same period, it also measured prevalence of people who did not drink for their whole lives or were current drinkers (ie, drank alcohol at least once a year) using surveys for 149 countries, and binge drinkers (drinking 60g or more pure alcohol in one sitting once or more within 30 days) using surveys from 118 countries. Using estimates of gross domestic product and the religious composition of the population, the results were modelled to create estimates for all 189 countries up to 2030.

In 2017, the lowest alcohol intakes were in North African and Middle Eastern countries (typically less than 1 litre per adult per year), while the highest intakes were in Central and Eastern European countries (in some cases more than 12 litres per adult per year). At the country-level, Moldova had the highest alcohol intake (15 litres per adult per year), and Kuwait had the lowest (0.005 litres per person per year)

Globally, alcohol consumption is set to increase from 5.9 litres pure alcohol a year per adult in 1990 to 7.6 litres in 2030. However, intake varied regionally. Between 2010-2017, consumption increased by 34% in southeast Asia (from 3.5 litres to 4.7 litres), with increases in India, Vietnam and Myanmar. In Europe, consumption reduced by 12% (from 11.2 to 9.8 litres), mainly due to decreases in former Soviet Republics

such as Azerbaijan, Kyrgyzstan, Ukraine, Belarus, and Russia. Intake levels remained similar in African, American, and Eastern Mediterranean regions.

In the UK, consumption decreased from 12.3 litres in 2010 to 11.4 litres in 2017, compared to increases of 38% in India (from 4.3 to 5.9 litres). Over the same timescale, consumption increased slightly in the USA (9.3-9.8 litres) and in China (7.1-7.4 litres).

Globally, the prevalence of lifetime abstinence decreased from 46% in 1990 to 43% in 2017, while the prevalence of current drinking increased from 45% in 1990 to 47% in 2017, and the prevalence of heavy episodic drinking increased from 18.5% to 20%. However, the authors note that the changes in abstinence and heavy episodic drinking are not statistically significant.

They estimate these trends to continue, and that by 2030 40% of people will abstain from alcohol, 50% of people will drink alcohol, and almost a quarter (23%) will binge drink at least once a month.

They note that, globally, and in most regions, the volume of alcohol consumed grows faster than the number of drinkers (for example, alcohol per capita is expected to grow by 17.8% from 6.5-7.6 litres globally between 2018-2030, while the number of current drinkers is estimated to grow by just 5% from 47.3% to 49.8% in the same timeframe), meaning the average alcohol intake per drinker is forecasted to increase. Increased alcohol intake per drinker not only results in a growing proportion of heavy episodic drinkers, but also inevitably leads to an increased alcohol-attributable disease burden.

"Alcohol use is prevalent globally, but with clear regional differences that can largely be attributed to religion, implementation of alcohol policies, and economic growth. Economic growth seems to explain the

global increase in alcohol use over the past few decades—for example, the economic transitions and increased wealth of several countries—in particular, the transitions of China and India—were accompanied by increased alcohol use. The growing alcohol market in middle-income countries is estimated to more than outweigh the declining use in high-income countries, resulting in a global increase," says Mr Manthey.

The authors note some limitations, including that there is uncertainty around estimates of unrecorded alcohol consumption, in addition to scarcity of data in certain regions. In addition, drinking status estimates were based on surveys, where individuals often under-report their intake. Their estimates for 2018-2030 are based on economic conditions and religion only, and cannot take future policy changes or behaviour changes into account.

Writing in a linked Comment, Dr. Sarah Callinan, La Trobe University, Australia, notes that the shift in alcohol consumption globally from high-income to lower income countries could lead to disproportionate increases in harm, as the harm per litre of alcohol is substantially higher in low-income and middle-income countries than in high-income countries. She says: "An increasingly robust evidence base supports use of key alcohol policy levers such as increasing price and restricting availability to curtail growing alcohol consumption beyond Europe and North America. However, this evidence comes largely from high-income countries, and the potential efficacy of such policies in lower-middle-income countries, where more than half of alcohol consumption is unrecorded, is likely to be limited without substantial reductions in unrecorded alcohol consumption (although previous studies show that unrecorded consumption tends to decline with economic development). Thus, although price or availability-based policies are important, strict restrictions on advertising and other promotional activities are crucial to slow the growing demand for alcohol in these countries. Similarly, rigorous drink-driving countermeasures are

necessary so that increasing consumption does not lead to increases in road traffic injury. Supporting evidence-based policies outside high-income countries, despite anticipated strong industry resistance, will be a key task for public health advocates in the coming decades."

More information: Jakob Manthey et al, Global alcohol exposure between 1990 and 2017 and forecasts until 2030: a modelling study, *The Lancet* (2019). DOI: 10.1016/S0140-6736(18)32744-2

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