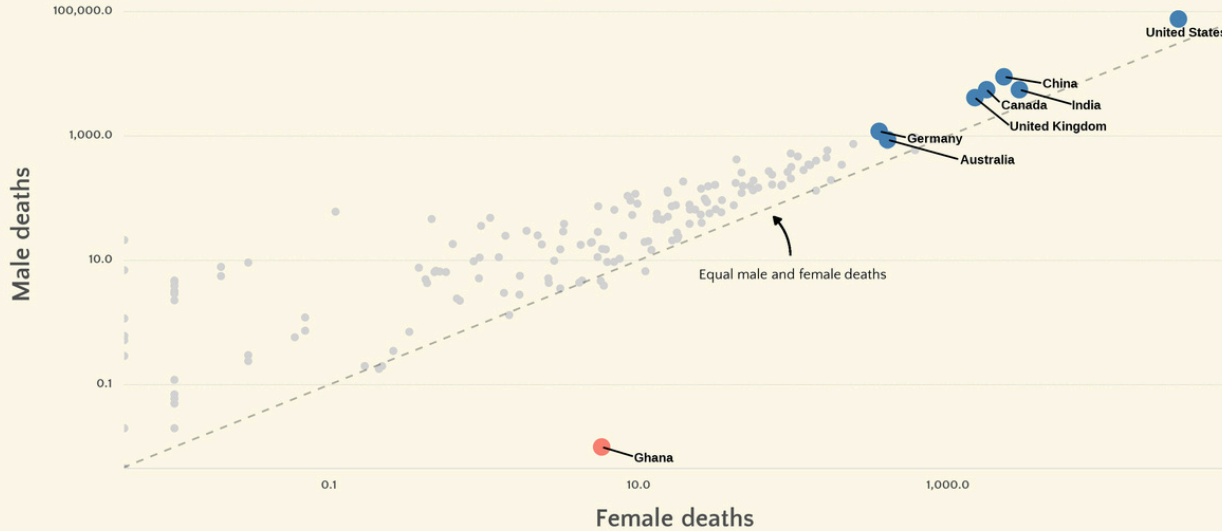


The Dual Crisis: Mental Health and Substance Abuse in the Modern World

Drug Use Disorders and Mortality: Understanding the Gender Gap

The data across various countries has revealed a concerning trend: the number of deaths resulting from **drug use disorders** is significantly high in the **United States**, with approximately **100,000 deaths recorded in 2021 alone**. Furthermore, the data suggests that in most countries with the exception of Ghana, males are disproportionately affected by drug use disorders, with **death rates among males consistently exceeding those among females**. This highlights that males are at a far greater risk of succumbing to the harmful effects of illicit drugs.



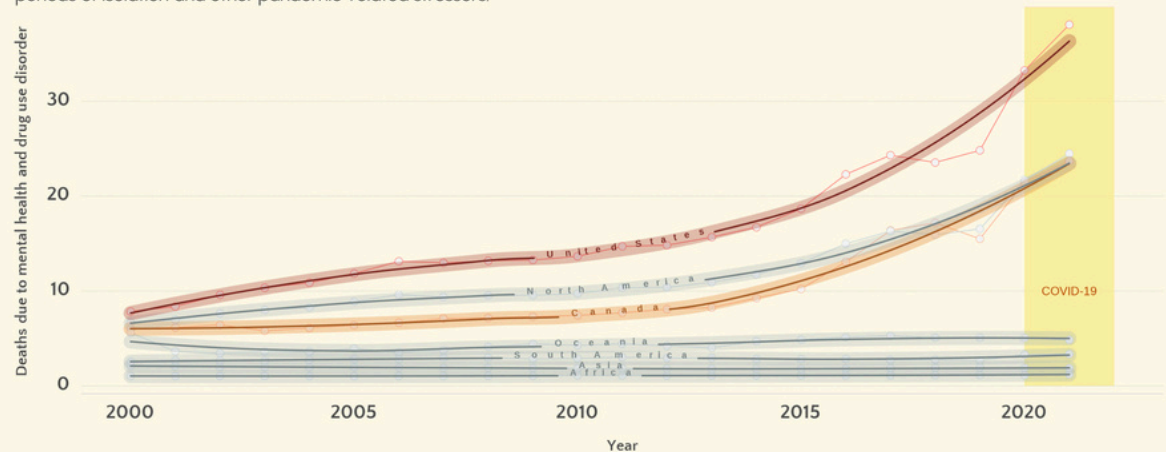
#Rstudio #ggplot2 | Source: IHME, Global Burden of Disease, 2021

Males are disproportionately more affected globally due to drug use mortality

The United States and Canada are the worst affected by deaths as a result of mental health and substance use disorders. These numbers **have spiked since COVID-19**

Global Trends in Deaths from Mental Health and Substance Use Disorders (2000-2022)

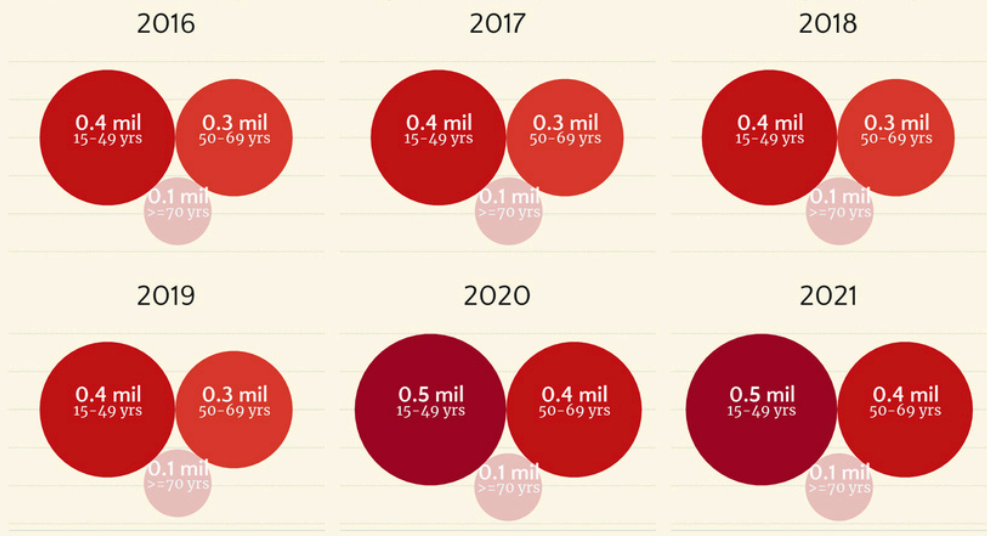
The number of deaths due to mental health and substance use disorders per 100,000 individuals over the years reveals a troubling trend for two specific countries: **the United States and Canada**. While the death rates have remained relatively stable across other continents, North America presents a stark contrast. Both countries have experienced a significant increase in deaths, particularly in recent years. **This rise has been notably steep following the COVID-19 pandemic**, which may have exacerbated mental health issues due to extended periods of isolation and other pandemic-related stressors.



#Rstudio #ggplot2 | Source: World Health Organisation

Persistent Trends in Deaths from Mental Health and Substance Use Disorders among Middle-Aged Groups

A closer examination of deaths due to mental health and substance use disorders reveals that **middle-aged individuals, particularly those between 15-49 years, have consistently experienced the highest mortality rates.** In recent years, the death toll in this age group has reached up to **half a million annually**, closely followed by those aged 50-69 years. A significant portion of these deaths occur among the working-age population, suggesting that **professional pressures and stress could be major contributing factors to the decline in mental health, particularly for individuals aged 15-49.**



#Rstudio #ggcirclepack #ggplot2 | Source: World Health Organisation (2024)

- Those aged **15 to 49** are disproportionately affected by mental health and substance use disorders.
- This age group largely comprises **working professionals**, suggesting that **high-pressure work environments** and related stressors could be significant contributing factors.

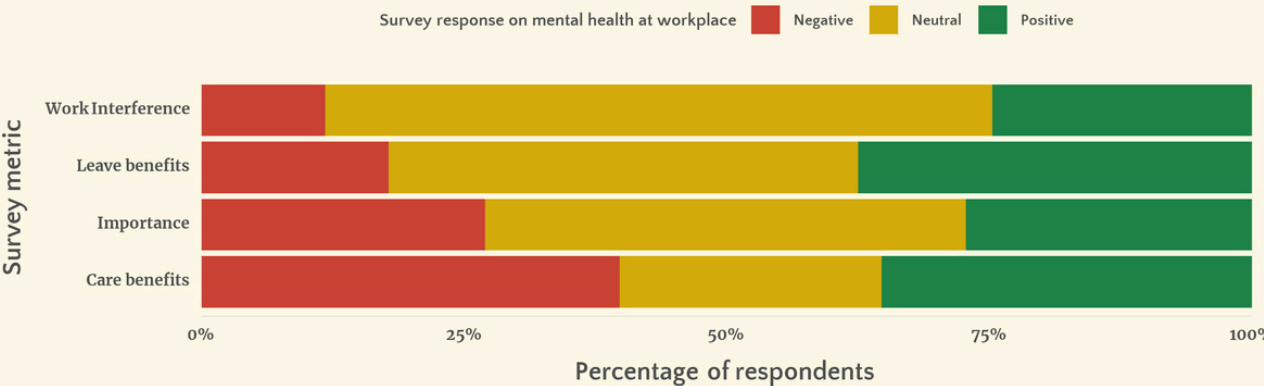
A survey of employees in the tech industry across 48 countries reveals that **over 50 % of employers** are not taking adequate measures to support their employees' mental health and well-being.

Mental Health in High-Stress Work Environments: Are Employers Doing Enough?

The World Health Organization's data on deaths from mental health and substance use disorders reveals that those aged 15-49 years are the most affected group. With many in this age range being of prime working age, it raises concerns about the impact of workplace environments on mental health.

A 2016 global survey of tech industry employees across 48 countries explored this issue, finding that about **75% of respondents believed, or were unsure, that mental health problems interfered with their job performance.** Despite this, over 50% felt that their employers did not take sufficient steps to address mental health concerns.

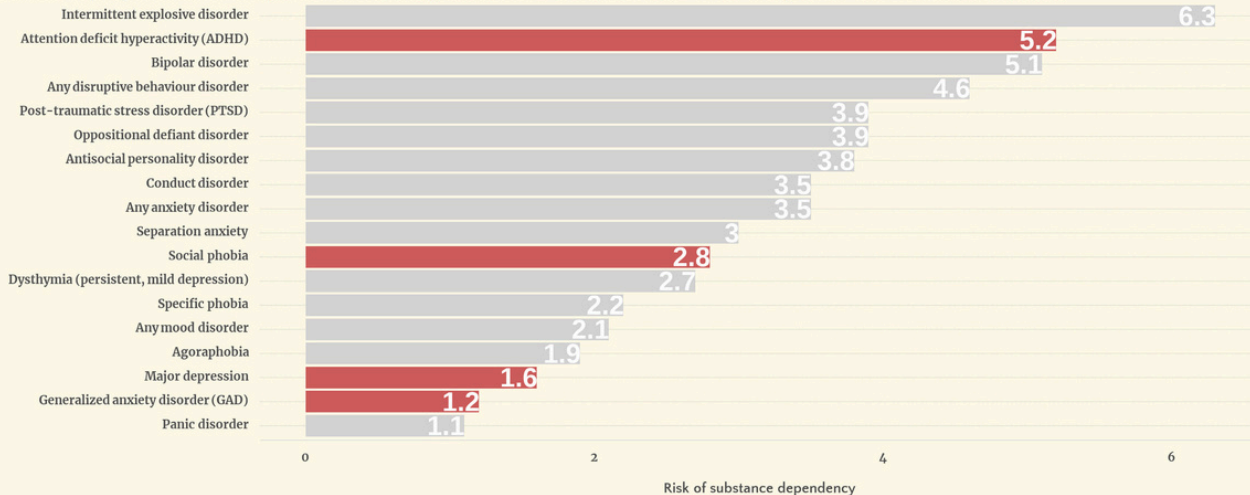
This trend highlights a significant issue: **employees in high-stress industries like tech may develop severe mental health problems and turn to illicit substances as coping mechanisms.** This underscores the urgent need for better mental health support in workplaces to prevent these outcomes.



#Rstudio #ggplot2 | Source: OSMI Tech Survey (2016)

Elevated Risk of Substance Dependence Among Professionals in High-Stress Work Environments

A high-pressure work environment can significantly impact the mental well-being of professionals, often making them vulnerable to mental health disorders. Statistics show a strong correlation between developing a mental health condition and subsequent substance dependence. Among working professionals, the most common mental health disorders include **ADHD, Social Phobia, Major Depression, and Generalized Anxiety Disorder**. The values presented indicate the likelihood of individuals who develop one of these conditions also turning to substance use as a coping mechanism. **A person with a diagnosed ADHD condition is 5.2 times likely to fall victim to substance use.**



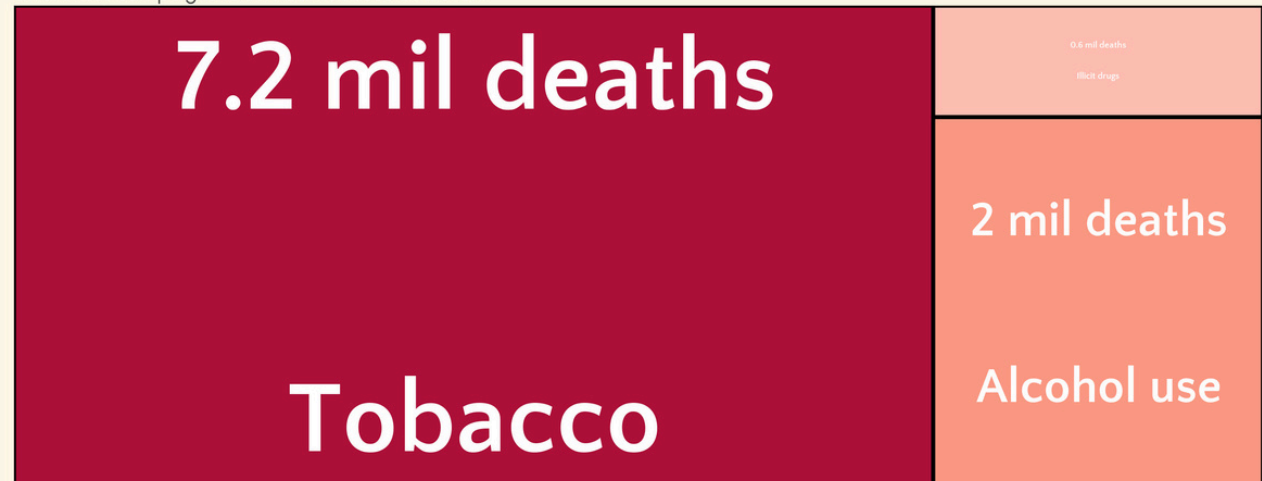
#Rstudio #ggplot2 | Source: Swendsen et al. (2010)

- A study by Swendsen et al. found that individuals with mental health conditions are **statistically more likely to develop drug dependencies**.
- For **professionals working in high-stress environments**, they could be up to **5.2 times** likely to fall victims to substance abuse.

- **Tobacco** remains the most lethal substance of abuse, causing more than **3 times the number of deaths compared to alcohol**, the second deadliest substance.
- The death toll from tobacco use is **nearly 12 times higher than that from illicit drugs**.

Tobacco's Toll: Addressing the Leading Cause of Global Substance-Related Deaths

In 2021, the global annual number of deaths caused by substance use highlighted **tobacco as the leading cause**, with a staggering **7.2 million deaths**. **Alcohol** followed as the second highest at **2 million deaths**, and **illicit drugs** accounted for **0.6 million deaths**. The overwhelming number of deaths from tobacco, primarily due to smoking, suggests that a significant portion of the global population remains dependent on it. Smoking is often the first substance people become addicted to, often triggered by mental health challenges such as stress. The fact that **tobacco-related deaths are more than three times higher than the next leading cause of substance-related deaths** underscores the urgent need for focused efforts to limit easy access to tobacco products, such as cigarettes, and to promote cessation programs and awareness campaigns to combat tobacco addiction.

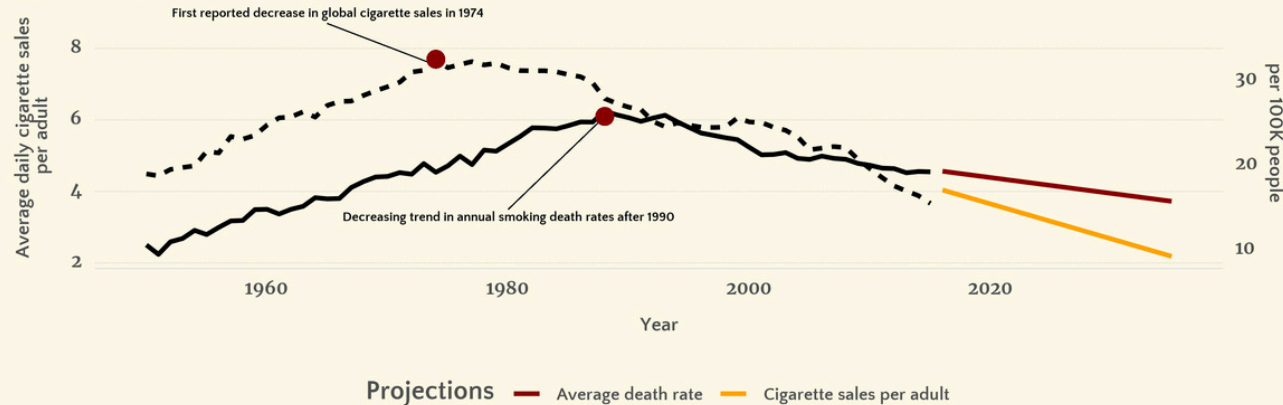


#Rstudio #ggtreemap #ggplot2 | Source: IHME Global Burden of Disease (2021)

Turning the Tide: Decreasing Cigarette Consumption and Deaths Among Smokers

Smoking tobacco-based products remains the most widely abused addictive substance, particularly among individuals struggling with mental health issues. The harmful effects of smoking are well-documented, with lung cancer being a leading cause of death among heavy smokers. However, there is **a positive trend emerging: the average number of cigarettes sold per adult (aged 15 and above) has been steadily declining since 1974**.

This decline is accompanied by a **notable reduction in annual death rates among smokers**. If this trend continues, both the average number of cigarettes sold per adult and the related death rates are **expected to reach record lows** in the coming years. This marks a significant step forward in the fight against substance abuse and its detrimental health effects.



A positive trend !

- **Tobacco usage has declined since 1974** and is projected to decline to record lows in the coming years.
- **Consequently, cigarette-related deaths have also decreased since 1990.**

A concerning trend !

- The use of synthetic drugs, particularly opioids, has seen a steep and alarming rise in recent years.
- Since 1990, the death rate from opioid overdoses has surged by up to **58 times**.

Rising Overdose Deaths: An Urgent Call for Action on Illicit Drug Abuse

The recent surge in overdose deaths in the United States, particularly due to illicit drugs like opioids, heroin, and cocaine, is deeply concerning. This trend suggests that more people are increasingly turning to these substances, potentially driven by underlying issues such as mental health disorders, which lead to addiction and, ultimately, fatal outcomes. In recent years, the **annual death rate due to overdoses has climbed to 20 per 100,000 people** and continues to rise at an alarming pace, particularly for **synthetic opioids** whose death rates have risen by 58 times since the year 1999.

The upward trajectory highlights an **urgent need for targeted interventions** to address the growing number of drug users and prevent further loss of life due to substance abuse.

