

## Comparative Analysis of Different Types of Alcohol Consumption on Life Expectancy

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December 7, 2021

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### Abstract

In this paper, we selected 15 countries for comparative analysis of total and individual types of alcohol consumption and among which, 7 countries of Life Expectancy (LE) from both developed countries and developing countries. We categorized alcohol drinks into three types, namely, beer, spirit and wine. Interestingly, although some countries have very similar amount of alcohol consumption per capita, the result which led by alcohol consumption of different types can make a big difference. In other words, the impact of different types of alcohol is unequable.

Keywords: Alcohol consumption, Life Expectancy, Public policy

#### I. Introduction

Alcohol consumption is a considerable factor affecting Life Expectancy. The consumption of alcohol drinks varies in different countries, thus, leads to significant difference of impact in individual countries. The results were generated in Tableau for analysis and visualization. Two datasets were used for analysis; one is Alcohol consumption of 193 countries and the other dataset is LE of 193 countries from 1960 to 2019 from world bank. The data showed some interesting results which can be very helpful for health sectors, public policy makers as well as multinational companies [1]. The countries selected for alcohol consumption comparative analysis including Australia, Brazil, Canada, Chile, China, France, Germany, Italy, Japan, New Zealand, Netherlands, Russian Federation, Switzerland, UK and USA [2].

#### II. Methodology

In our analysis we collected datasets and filtered the feature as well as the attributes that were required for our research analysis. Our datasets consist of two categories i.e. developed and developing countries. We carried our experimental analysis by using Tableau tool. Our experimental results are represented through Figures 1,2,3,4 and 5 respectively.

#### III. Results

Among the selected countries, Germany is the No.1 Beer-drinking country, 346 Liters /capita annually. And Germany's LE is relatively high which is above 80.



Figure 1. Comparison of Beer Consumption

Russians really loves Spirits. No.1 ranking in spirits consumption of 320 Liters/capita per year is

consumed by Russians, around 160% of that of No.2 Japan and No.3 China.



Figure 2. Comparison of Spirit Consumption

360 Liters/capita of wine is consumed in France per year, making it the No.1 wine-drinking country. However, the fact that France has high LE shows wine is healthy.



Figure 3. Comparison of Wine consumption

France ranked No.1 in total alcohol consumption followed by Russia and Germany closely. Surprisingly, the top 3 alcohol consuming countries have different LE [3]. Despite economy and healthcare, spirits seem to be the unhealthiest drinks that affects LE negatively.



Figure 5. Comparison of total pure alcohol consumption

In the selected countries, there are both developed countries and developing countries appeared on the list of top alcohol consuming, namely, France, Russia and Germany. However, there is a big gap of life expectancy between the three countries. The most beer-drinking country Germany and the most wine-drinking country France have remained a big significant gap while there is only a slight difference between Germany and France. Among the list, China's life expectancy saw the most significant increase of 33 years. However, it is still far lower than developed countries such as Germany, Canada and France till 2019.



Figure 4. Comparison of life expectancy over 60 years

#### IV. Conclusion

It is worth noting that both being developing countries, China's LE sees a dramatic increasing trend while LE in Russia fluctuated. China's LE surpassed that of Russia at 1990s and since then remained a gap, which could explain further that spirits are harmful to health regardless of other factors. The implication for public policy makers and healthcare sectors thus is to make policies which encourage alcohol-loving people to drink wine or beer and discourage people to drink spirits. For the beverage companies, advertising wine and beer rather than spirit to echo the policies to improve LE and build a better corporate image by practicing CSR (Corporate Social Responsibility).

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