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Interpretations to our overall mental health perceptions



# Mental Health data

From 'Our World in Data' estimated by the Institute for Health Metrics and Evaluation.

Focused on Depression and Anxiety.

100,000 individuals.

Produced a measurement for mental health.

Disability Adjusted Life Years (DALYs) which measures the health burden of mental health issues (such as Depression and Anxiety) per

One DALY equals one lost year of healthy life

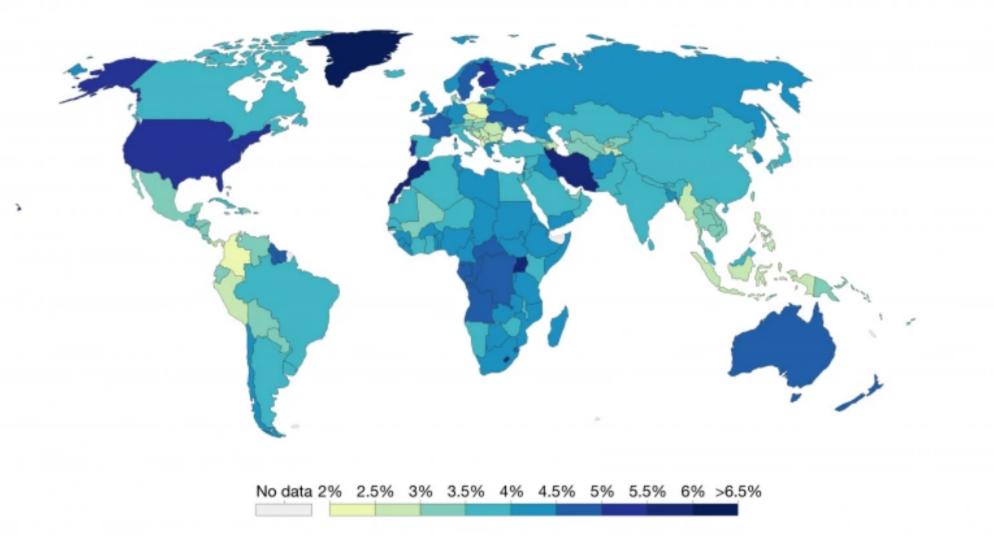
Data only showing up to 2017 - which is a bit old!



#### Share of the population with depression, 2016



Prevalence of depressive disorders in a given population. This is measured as the age-standardized prevalence, which assumes a constant age structure to compare between countries and through time. Figures attempt to provide a true estimate (going beyond reported diagnosis) of depression prevalence based on medical, epidemiological data, surveys and meta-regression modelling.



Source: IHME, Global Burden of Disease

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#### **Mental Health**

We provide a global overview of the prevalence of depression, anxiety disorders, bipolar disorder, eating disorders, and schizophrenia.

Our World in Data



### Process

#### **Extraction**

Sourcing Extraction Cleanup

#### **Transformation**

Pandas

Matplotlib

Machine Learning

(Python Scikit-Learn)

## Deploy



### Loading

Flask
PostgreSQL
Render Template
HTML, CSS
JavaScript, D3



## Machine Learning

Supervised Learning
Data only showing up to 2017. Performed machine learning (supervised learning regression) to forecast observations up to 2021.
For Loop
Data has 200+ countries and five age groups for anxiety and depression.
This was a struggle!
Model accuracy

The model is not very accurate, but the results seem to follow historical trend.

Model accuracy was not important to us.

The sample size used to run the ML may be a factor.



There was a lot of sighing and anxiety....





## What Do You Think?

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We welcome any questions you may have.