# CAUSE OF DEATH PROJECT REORT

- INTRODUCTION
- EXPLORATORY DATA ANALYSIS
- FEATURE ENGINEERING
- UNIVARIATE ANALYSIS
- BIVARIATE ANALYSIS
- MULTIVARIATE ANALYSIS
- OUTLIER TESTING AND SKEWNESS
- CORRELATION BETWEEN FEATURES
- FINDINGS AND CONCLUSION

#### **INTRODUCTION**

#### **ABSTRACT**

A straightforward way to assess the health status of a population is to focus on mortality – or concepts like child mortality or life expectancy, which are based on mortality estimates. A focus on mortality, however, does not take into account that the burden of diseases is not only that they kill people, but that they cause suffering to people who live with them. Assessing health outcomes by both mortality and morbidity (the prevalent diseases) provides a more encompassing view on health outcomes. This is the topic of this entry. The sum of mortality and morbidity is referred to as the 'burden of disease' and can be measured by a metric called 'Disability Adjusted Life Years' (DALYs). DALYs are measuring lost health and are a standardized metric that allow for direct comparisons of disease burdens of different diseases across countries, between different populations, and over time. Conceptually, one DALY is the equivalent of losing one year in good health because of either premature death or disease or disability. One DALY represents one lost year of healthy life. The first 'Global Burden of Disease' (GBD) was GBD 1990 and the DALY metric was prominently featured in the World Bank's 1993 World Development Report. Today it is published by both the researchers at the Institute of Health Metrics and Evaluation (IHME) and the 'Disease Burden Unit' at the World Health Organization (WHO), which was created in 1998. The IHME continues the work that was started in the early 1990s and publishes the Global Burden of Disease study.

#### **Content**

In this Dataset, we have Historical Data of different cause of deaths for all ages around the World. The key features of this Dataset are: Meningitis, Alzheimer's Disease and Other Dementias, Parkinson's Disease, Nutritional Deficiencies, Malaria, Drowning, Interpersonal Violence, Maternal Disorders, HIV/AIDS, Drug Use Disorders, Tuberculosis, Cardiovascular Diseases, Lower Respiratory Infections, Neonatal Disorders, Alcohol Use Disorders, Self-harm, Exposure to Forces of Nature, Diarrheal Diseases, Environmental Heat and Cold Exposure, Neoplasms, Conflict and Terrorism, Diabetes Mellitus, Chronic Kidney Disease, Poisonings, Protein-Energy Malnutrition, Road Injuries, Chronic Respiratory Diseases, Cirrhosis and Other Chronic Liver Diseases, Digestive Diseases, Fire, Heat, and Hot Substances, Acute Hepatitis.

#### **Dataset Glossary (Column-wise)**

- 01. Country/Territory Name of the Country/Territory
- 02. Code Country/Territory Code
- 03. Year Year of the Incident
- 04. Meningitis No. of People died from Meningitis
- 05. Alzheimer's Disease and Other Dementias No. of People died from Alzheimer's Disease and Other Dementias
- 06. Parkinson's Disease No. of People died from Parkinson's Disease
- 07. Nutritional Deficiencies No. of People died from Nutritional Deficiencies
- 08. Malaria No. of People died from Malaria

- 09. Drowning No. of People died from Drowning
- 10. Interpersonal Violence No. of People died from Interpersonal Violence
- 11. Maternal Disorders No. of People died from Maternal Disorders
- 12. Drug Use Disorders No. of People died from Drug Use Disorders
- 13. Tuberculosis No. of People died from Tuberculosis
- 14. Cardiovascular Diseases No. of People died from Cardiovascular Diseases
- 15. Lower Respiratory Infections No. of People died from Lower Respiratory Infections
- 16. Neonatal Disorders No. of People died from Neonatal Disorders
- 17. Alcohol Use Disorders No. of People died from Alcohol Use Disorders
- 18. Self-harm No. of People died from Self-harm
- 19. Exposure to Forces of Nature No. of People died from Exposure to Forces of Nature
- 20. Diarrheal Diseases No. of People died from Diarrheal Diseases
- 21. Environmental Heat and Cold Exposure No. of People died from Environmental Heat and Cold Exposure
- 22. Neoplasms No. of People died from Neoplasms
- 23. Conflict and Terrorism No. of People died from Conflict and Terrorism
- 24. Diabetes Mellitus No. of People died from Diabetes Mellitus
- 25. Chronic Kidney Disease No. of People died from Chronic Kidney Disease
- 26. Poisonings No. of People died from Poisoning
- 27. Protein-Energy Malnutrition No. of People died from Protein-Energy Malnutrition
- 28. Chronic Respiratory Diseases No. of People died from Chronic Respiratory Diseases
- 29. Cirrhosis and Other Chronic Liver Diseases No. of People died from Cirrhosis and Other Chronic Liver Diseases
- 30. Digestive Diseases No. of People died from Digestive Diseases
- 31. Fire, Heat, and Hot Substances No. of People died from Fire or Heat or any Hot Substances
- 32. Acute Hepatitis No. of People died from Acute Hepatitis

# **Background**

Data on causes of death by age and sex are a critical input into health decision-making. Priority setting in public health should be informed not only by the current magnitude of health problems but by trends in them. However, cause of death data are often not available or are subject to substantial problems of comparability. We propose major cause of death for countries. Below mentioned are the methods used for data analysis:

# **METHODS AND ANALYSIS TOOLS USED:**

EXPLORATORY DATA ANALYSIS
FEATURE ENGINEERING
UNIVARIATE ANALYSIS
BIVARIATE ANALYSIS
MULTIVARIATE ANALYSIS
OUTLIER TESTING AND SKEWNESS
CORRELATION BETWEEN FEATURES

#### **EXPLORATORY DATA ANALYSIS**

The data set contains 6120 rows and 34 columns.

The **column** names include:

['Country/Territory', 'Code', 'Year', 'Meningitis', 'Alzheimer's Disease and Other Dementias', 'Parkinson's Disease', 'Nutritional Deficiencies', 'Malaria', 'Drowning', 'Interpersonal Violence', 'Maternal Disorders', 'HIV/AIDS', 'Drug Use Disorders', 'Tuberculosis', 'Cardiovascular Diseases', 'Lower Respiratory Infections', 'Neonatal Disorders', 'Alcohol Use Disorders', 'Self-harm', 'Exposure to Forces of Nature', 'Diarrheal Diseases', 'Environmental Heat and Cold Exposure', 'Neoplasms', 'Conflict and Terrorism', 'Diabetes Mellitus', 'Chronic Kidney Disease', 'Poisonings', 'Protein-Energy Malnutrition', 'Road Injuries', 'Chronic Respiratory Diseases', 'Cirrhosis and Other Chronic Liver Diseases', 'Digestive Diseases', 'Fire, Heat, and Hot Substances', 'Acute Hepatitis', 'Total number of deaths', 'Total deaths']

In these 34 columns only country territory and code column contains categorical data and thus are declared as object data types.

Rest all the columns indicate deaths due to diseases and an year column which are numerical in nature.

We already discussed the description of all the columns during introduction so now let's find the null values in each column: 0

As the data said does not contain any null values we can proceed ahead with the statistical summary of the data.

#### **DATASET DESCRIPTION:**

For the year column as the data starts from the year 1990 and the last year is 2019 so all the data lies between these years only.

By analysing the minimum count of deaths, cardiovascular diseases Neoplasms diabetes mellitus and chronic respiratory diseases have non zero values other all the diseases have zero deaths as their minimum values.

These diseases also contribute to the maximum number of deaths.

By checking unique values in categorical columns I eat a country territory column and the code column they have 204 unique values I eat the data set contains data of deaths of 204 countries.

Each country name is represented by a code that is a separate column so both country territory column and the code column represent one and the same data. By analysing the value counts of categorical data we can see that for each country we have 30 values.

For column Country/Territory unique values are: ['Afghanistan' 'Albania' 'Algeria' 'American Samoa' 'Andorra' 'Angola', 'Antigua and Barbuda' 'Argentina' 'Armenia' 'Australia' 'Austria' 'Azerbaijan' 'Bahamas' 'Bahrain' 'Bangladesh' 'Barbados' 'Belarus' 'Belgium' 'Belize' 'Benin' 'Bermuda' 'Bhutan' 'Bolivia' 'Bosnia and Herzegovina' 'Botswana' 'Brazil' 'Brunei' 'Bulgaria' 'Burkina Faso' 'Burundi' 'Cambodia' 'Cameroon' 'Canada' 'Cape Verde' 'Central African Republic' 'Chad' 'Chile' 'China' 'Colombia' 'Comoros' 'Congo' 'Cook Islands' 'Costa Rica' "Cote d'Ivoire" 'Croatia' 'Cuba' 'Cyprus' 'Czechia' 'Democratic Republic of Congo' 'Denmark' 'Djibouti' 'Dominica' 'Dominican Republic' 'Ecuador' 'Egypt' 'El Salvador' 'Equatorial Guinea' 'Eritrea' 'Estonia' 'Eswatini' 'Ethiopia' 'Fiji' 'Finland' 'France' 'Gabon' 'Gambia' 'Georgia' 'Germany' 'Ghana' 'Greece' 'Greenland' 'Grenada' 'Guam' 'Guatemala' 'Guinea' 'Guinea-Bissau' 'Guyana' 'Haiti' 'Honduras' 'Hungary' 'Iceland' 'India' 'Indonesia' 'Iran' 'Iraq' 'Ireland' 'Israel' 'Italy' 'Jamaica' 'Japan' 'Jordan' 'Kazakhstan' 'Kenya' 'Kiribati' 'Kuwait' 'Kyrgyzstan' 'Laos' 'Latvia' 'Lebanon' 'Lesotho' 'Liberia' 'Libya' 'Lithuania' 'Luxembourg' 'Madagascar' 'Malawi' 'Malaysia' 'Maldives' 'Mali' 'Malta' 'Marshall Islands' 'Mauritania' 'Mauritius' 'Mexico' 'Micronesia' 'Moldova' 'Monaco' 'Mongolia' 'Montenegro' 'Morocco' 'Mozambique' 'Myanmar' 'Namibia' 'Nauru' 'Nepal' 'Netherlands' 'New Zealand' 'Nicaragua' 'Niger' 'Nigeria' 'Niue' 'North Korea' 'North Macedonia' 'Northern Mariana Islands' 'Norway' 'Oman' 'Pakistan' 'Palau' 'Palestine' 'Panama' 'Papua New Guinea' 'Paraguay' 'Peru' 'Philippines' 'Poland' 'Portugal' 'Puerto Rico' 'Qatar' 'Romania' 'Russia' 'Rwanda' 'Saint Kitts and Nevis' 'Saint Lucia' 'Saint Vincent and the Grenadines' 'Samoa' 'San Marino' 'Sao Tome and Principe' 'Saudi Arabia' 'Senegal' 'Serbia' 'Sevchelles' 'Sierra Leone' 'Singapore' 'Slovakia' 'Slovenia' 'Solomon Islands' 'Somalia' 'South Africa' 'South Korea' 'South Sudan' 'Spain' 'Sri Lanka' 'Sudan' 'Suriname' 'Sweden' 'Switzerland' 'Syria' 'Taiwan' 'Tajikistan' 'Tanzania' 'Thailand' 'Timor' 'Togo' 'Tokelau' 'Tonga' 'Trinidad and Tobago' 'Tunisia' 'Turkey' 'Turkmenistan' 'Tuvalu' 'Uganda' 'Ukraine' 'United Arab Emirates' 'United Kingdom' 'United States' 'United States Virgin Islands' 'Uruguay' 'Uzbekistan' 'Vanuatu' 'Venezuela' 'Vietnam' 'Yemen' 'Zambia' 'Zimbabwe'] For column Country/Territory count of unique values are: 204

For column Code unique values are: ['AFG' 'ALB' 'DZA' 'ASM' 'AND' 'AGO' 'ATG' 'ARG' 'ARM' 'AUS' 'AUT' 'AZE'

'BHS' 'BHR' 'BGD' 'BRB' 'BLR' 'BEL' 'BLZ' 'BEN' 'BMU' 'BTN' 'BOL' 'BIH' 'BWA' 'BRA' 'BRN' 'BGR' 'BFA' 'BDI' 'KHM' 'CMR' 'CAN' 'CPV' 'CAF' 'TCD' 'CHL' 'CHN' 'COL' 'COM' 'COG' 'COK' 'CRI' 'CIV' 'HRV' 'CUB' 'CYP' 'CZE' 'COD' 'DNK' 'DJI' 'DMA' 'DOM' 'ECU' 'EGY' 'SLV' 'GNQ' 'ERI' 'EST' 'SWZ' 'ETH' 'FJI' 'FIN' 'FRA' 'GAB' 'GMB' 'GEO' 'DEU' 'GHA' 'GRC' 'GRL' 'GRD' 'GUM' 'GTM' 'GIN' 'GNB' 'GUY' 'HTI' 'HND' 'HUN' 'ISL' 'IND' 'IDN' 'IRN' 'IRQ' 'IRL' 'ISR' 'ITA' 'JAM' 'JPN' 'JOR' 'KAZ' 'KEN' 'KIR' 'KWT' 'KGZ' 'LAO' 'LVA' 'LBN' 'LSO' 'LBR' 'LBY' 'LTU' 'LUX' 'MDG' 'MWI' 'MYS' 'MDV' 'MLI' 'MLT' 'MHL' 'MRT' 'MUS' 'MEX' 'FSM' 'MDA' 'MCO' 'MNG' 'MNE' 'MAR' 'MOZ' 'MMR' 'NAM' 'NRU' 'NPL' 'NLD' 'NZL' 'NIC' 'NER' 'NGA' 'NIU' 'PRK' 'MKD' 'MNP' 'NOR' 'OMN' 'PAK' 'PLW' 'PSE' 'PAN' 'PNG' 'PRY' 'PER' 'PHL'

'POL' 'PRT' 'PRI' 'QAT' 'ROU' 'RUS' 'RWA' 'KNA' 'LCA' 'VCT' 'WSM' 'SMR' 'STP' 'SAU' 'SEN' 'SRB' 'SYC' 'SLE' 'SGP' 'SVK' 'SVN' 'SLB' 'SOM' 'ZAF' 'KOR' 'SSD' 'ESP' 'LKA' 'SDN' 'SUR' 'SWE' 'CHE' 'SYR' 'TWN' 'TJK' 'TZA' 'THA' 'TLS' 'TGO' 'TKL' 'TON' 'TTO' 'TUN' 'TUR' 'TKM' 'TUV' 'UGA' 'UKR' 'ARE' 'GBR' 'USA' 'VIR' 'UZB' 'VUT' 'VEN' 'VNM' 'YEM' 'ZMB' 'ZWE'] For column Code count of unique values are: 204

#### **FEATURE ENGINEERING**

Buy analysing is column we can divide the whole data set into two groups or two set of features that is one the country and the year and the rest the diseases features data set that contains data for all the diseases.

```
cause_of_deaths = ['Meningitis',
'Alzheimer\'s Disease and Other Dementias', 'Parkinson\'s Disease',
'Nutritional Deficiencies', 'Malaria', 'Drowning',
'Interpersonal Violence', 'Maternal Disorders', 'HIV/AIDS',
'Drug Use Disorders', 'Tuberculosis', 'Cardiovascular Diseases',
'Lower Respiratory Infections', 'Neonatal Disorders',
'Alcohol Use Disorders', 'Self-harm', 'Exposure to Forces of Nature',
'Diarrheal Diseases', 'Environmental Heat and Cold Exposure',
'Neoplasms', 'Conflict and Terrorism', 'Diabetes Mellitus',
'Chronic Kidney Disease', 'Poisonings', 'Protein-Energy Malnutrition',
'Road Injuries', 'Chronic Respiratory Diseases',
'Cirrhosis and Other Chronic Liver Diseases', 'Digestive Diseases',
'Fire, Heat, and Hot Substances', 'Acute Hepatitis']
```

#### **UNIVARIATE ANALYSIS**

Buy sorting values buy total deaths in the disease data set we found that the most number of deaths have been caused by cardiovascular diseases then Neoplasms chronic respiratory diseases lower respiratory infections neonatal disorders theoreal diseases and digestive diseases etc.

The least number of deaths are caused by fire heat and hot substances conflict and terrorism drug used disorders poisonings environmental heat and cold exposure and exposure to forces of nature throughout the countries.

#### **ANALYSIS USING SCATTER PLOT**

Buy analysing the scatter plots we can see that the countries where most of the number of deaths occurred were China India United States.

#### **HISTOGRAM**

By analysing the histogram of different diseases we can see that most of the deaths had frequency range of a particular interval only and extreme frequency ranges that were very less contributed to outliers. With the histogram we can even conclude that data contains a lot of outliers.

#### **ANALYSING DATA DISTRIBUTION**

For year column since the data is uniform the data can be considered to be less skewed but by analysing the range and frequency of diseases,

For most of the diseases death between 0 to 20000 or within 20000,

For diseases namely cardiovascular diseases, respiratory diseases neonatal diseases etc the frequency is very large as compared to other diseases and that also confirm that our data has lot of outliers and and skewood in nature.

# **BOX PLOT**

Except year column data, all disease column contain lot of outliers that means that's for most of the diseases is beyond normal frequency range.

#### **BIVARIATE ANALYSIS**

#### **Using scatter plot**

By plotting scatter plot between ear and country data countries namely Russia India United States Japan India China respectively have highest contribution to death for particularly all the diseases and we can consider this because of the large population of the country.

A decrease in total number of deaths can be seen for diseases: menlingnitis, nutritional deficiencies malaria drowning maternal disorders tuberculosis lower respiratory infections newnatal disorders exposure to forces of nature diarrheal diseases conflict and terrorism poisonings protein energy malnutrition acute hepatitis, per year.

For remaining diseases we can see an increase in total number of death per year.

#### Analysing relationships using LM plot

For meningitis nutritional deficiency drowning maternal disorders tuberculosis lower respiratory infections neonatal disorders diary diseases environmental heat and cold exposure conflict and terrorism protein energy malnutrition and acute hepatitis have a negative relation with the year column that indicates all these diseases are now contributing to lesser deaths than before.

An increase in number of death counts per year can be seen for these diseases: namely Alzheimer's disease as and other dimensions Parkinson's disease interpersonal violence HIV AIDS drug used disorders cardiovascular diseases alcohol used disorders Neoplasms diabetes mellitus chronic kidney disease sirosis and other chronic liver diseases digestive diseases.

For remaining diseases the relation is quite neutral with the year.

#### **MULTIVARIATE ANALYSIS**

A relation between the diseases and year for each particular country has been found and has been shown in the Jupiter notebook and can be further reviewed.

# **OUTLIER TESTING AND SKEWNESS**

Except year column data, all disease column contain lot of outliers that means that's for most of the diseases is beyond normal frequency range.

By Skewness values we can conclude that causes of death including conflict and terrorism exposure to forces of nature, nutritional deficiencies, drug used disorders protein energy malnutrition acute hepatitis diarrheal diseases maternal disorders tuberculosis poisoning Neoplasms are mainly highly skewed.

# Skewness values for features

Conflict and Terrorism	60.707004		
Exposure to Forces of Nature	34.507640		
<b>Nutritional Deficiencies</b>	14.863496		
Drug Use Disorders	13.367100		
Protein-Energy Malnutrition	13.115196		
Acute Hepatitis	12.756098		
Diarrheal Diseases	12.563758		
Maternal Disorders	12.278358		
Tuberculosis	12.022406		
Poisonings	10.929760		
Neoplasms	10.748333		
Environmental Heat and Cold Exp	osure 10.631493		
Drowning	10.553901		
Neonatal Disorders	10.447536		
Chronic Respiratory Diseases	10.298131		
Road Injuries	9.466209		
Cardiovascular Diseases	9.411914		
Parkinson's Disease	9.321242		
Alcohol Use Disorders	9.253511		
Malaria	9.159105		
Lower Respiratory Infections	9.036604		
Self-harm	8.973653		
Alzheimer's disease and Other De	mentias 8.695288		
Fire, Heat, and Hot Substances	8.578848		
Total number of deaths	8.322113		
Total deaths	8.322113		
Meningitis	8.248599		
Digestive Diseases	8.026536		
Diabetes Mellitus	8.022653		
Chronic Kidney Disease	7.919364		
Cirrhosis and Other Chronic Liver	Diseases 7.764715		
HIV/AIDS	6.610169		
Interpersonal Violence	5.777146		
Ÿear	0.000000		

The year column data and causes of death including interpersonal violence HIV AIDS cirrhosis and other chronic liver diseases and chronic kidney disease contribute less as compared to other causes of deaths in

skewness but still they are skewness.

# **GROUPING DATA SETS ON THE BASIS OF COUNTRY AND DEATH**

Sorting Data by total number of deaths:

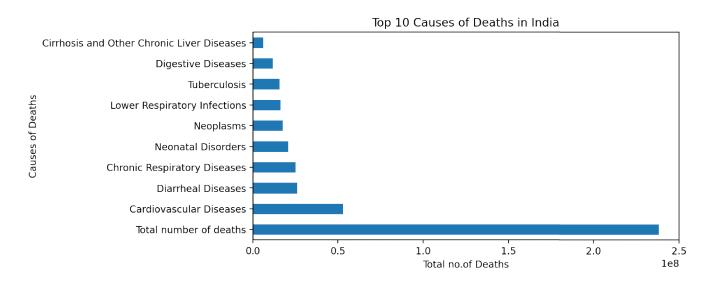
	Diseases	total_deaths
11	Cardiovascular Diseases	447741982.0
19	Neoplasms	229758538.0
96	Chronic Respiratory Diseases	104605334.0
2	Lower Respiratory Infections	83770038.0
13	Neonatal Disorders	76860729.0
7	Diarrheal Diseases	66235508.0
85	Digestive Diseases	65638635.0
0	Tuberculosis	45850803.0
7	Cirrhosis and Other Chronic Liver Diseases	37479321.0
8	HIV/AIDS	36364419.0
25	Road Injuries	36296469.0
21	Diabetes Mellitus	31448872.0
1	Alzheimer's Disease and Other Dementias	29768839.0
2	Chronic Kidney Disease	28911692.0
4	Malaria	25342676.0
15	Self-harm	23713931.0
3	Nutritional Deficiencies	13792032.0
6	Interpersonal Violence	12752839.0
24	Protein-Energy Malnutrition	12031885.0
0	Meningitis	10524572.0
5	Drowning	10301999.0
7	Maternal Disorders	7727046.0
2	Parkinson's Disease	7179795.0
4	Alcohal Use Disorders	4819018.0
0	Acute Hepatitis	3784791.0
9	Fire, Heat, and Hot Substances	3602914.0
0	Conflict and Terrorism	3294053.0
9	Drug Use Disorders	2656121.0
23	Paisonings	2601082.0
8	Environmental Heat and Cold Exposure	1788851.0
6	Exposure to Forces of Nature	1490132.0

By analysing total number of death accounts per country China remains on the top in contributing to total number of deaths.

India United States Russia Indonesia and Nigeria contribute to maximum total number of deaths after China.

Countries namely Tokelau, Niue, Nauru, Tuvalu, cook Islands, Palau etc contribute very less to total number of deaths.

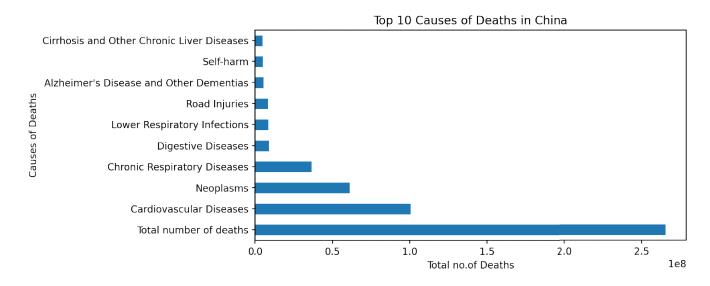
# ANALYSING CAUSES OF DEATH FOR TOP COUNTRIES CONTRIBUTING TO TOTAL NUMBER OF DEATHS:

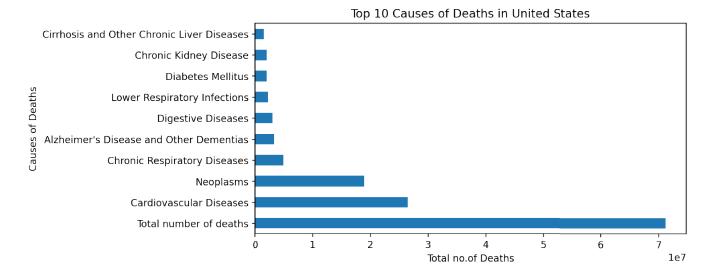


For India major contributors in total number of deaths are Alzheimer's disease and other dimentias Parkinson's disease drug use disorders cardiovascular diseases alcohol used disorders, environmental heat and cold exposure neoplasms diabetes mellitus chronic kidney disease road injuries chronic respiratory diseases cirrhosis and other chronic liver diseases and digestive diseases.

Over the years diseases like HIV AIDS cardiovascular diseases alcohol used disorders neoplas diabetes mellitus chronic kidney diseases road injuries have specifically kept on increasing.

For Russia Alzheimer's disease and other dementia's Parkinson's disease HIV AIDS diabetes mellitus syrosis and other chronic liver diseases digestive diseases have specifically kept on increasing with year.



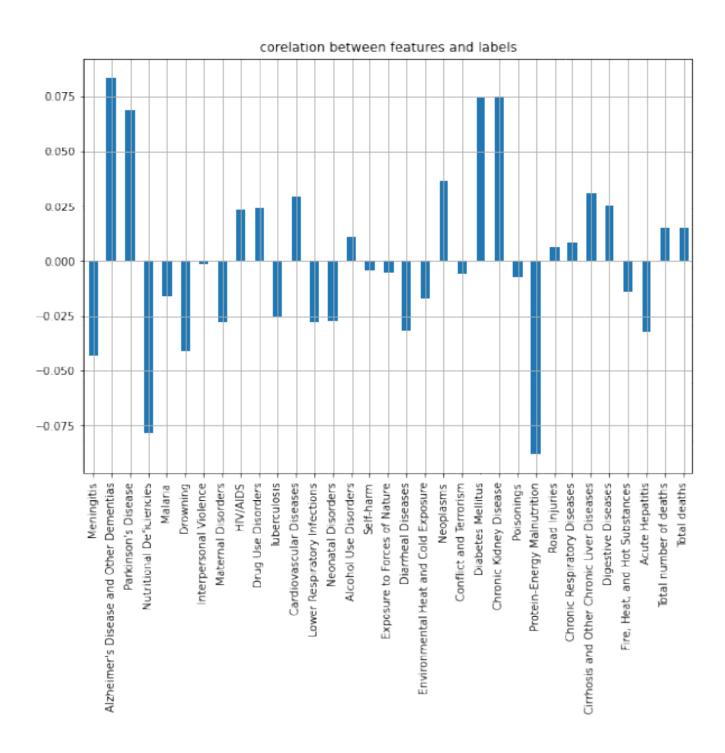


Also analysing USA and China's total number of deaths and the diseases causing them,

Alzheimer's disease and other dementious, Parkinson's disease, HIV AIDS cardiovascular disease poisoning road injuries chronic kidney disease diabetes mellitus neoplasms contributed the most.

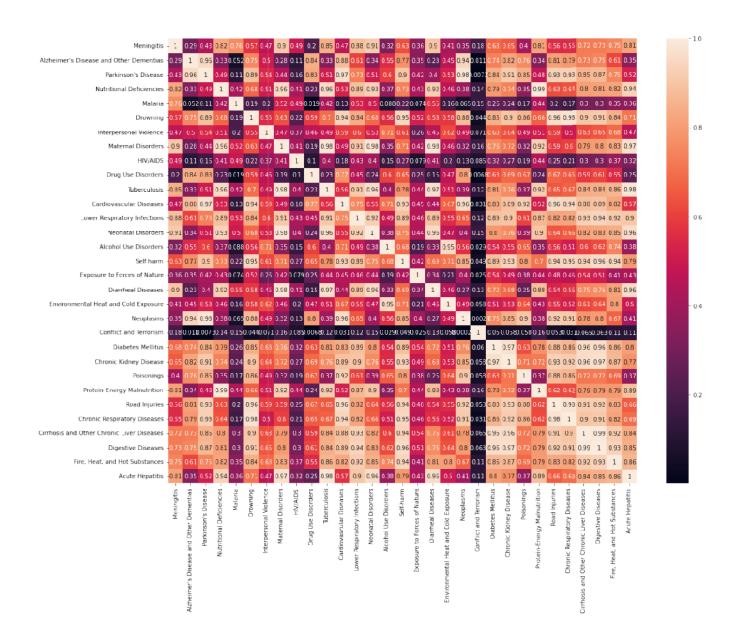
# **CORRELATION BETWEEN FEATURES**

As we analyse previously that the maximum number of death contributions were from exams disease and other dementia's Parkinson's disease chronic kidney diseases diabetes mellitus Neoplasms, cardiovascular diseases, these are the diseases that are contributing to more and more number of deaths each year.



By using the correlation we can see a positive and high relation between these highly contributing diseases.

For diseases like nutritional deficiency is protein energy malnutrition acute hepatitis environment heat and cold exposure neonatal diseases and lower respiratory infections we can see a negative correlation with the year column.



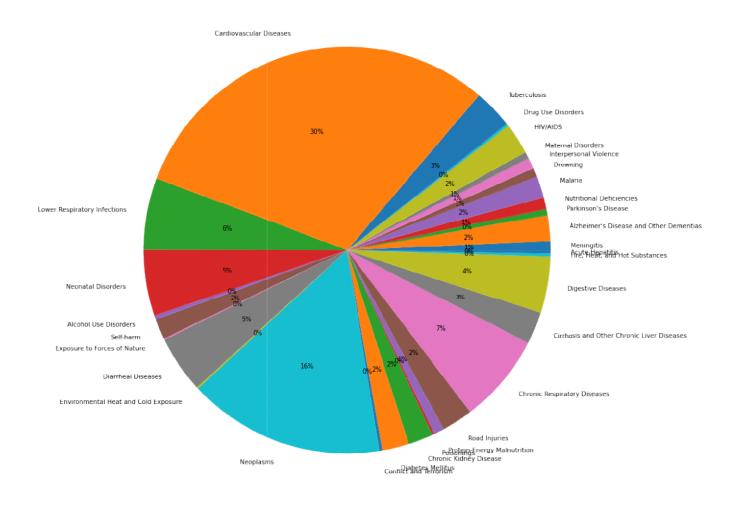
Analysing using heat map we can see a strong correlation between total number of deaths and diseases namely Parkinson's disease drowning cardiovascular diseases cell farm new plasmas diabetes mellitus chronic kidney disease road injuries chronic respiratory diseases and other chronic liver diseases and digestive diseases.

We can also see a strong correlation between diseases like protein energy malnutrition nutritional deficiencies maternal disorders.

Chronic kidney disease is highly core related with Parkinson's disease. New plas disease is highly correlated with Parkinson's disease and nutritional deficiencies and cardiovascular diseases and poisoning and cirrhosis and other chronic liver diseases.

Diseases and deaths due to HIV AIDS conflict and terrorism, malaria exposure to forces of nature are very less correlated with other causes of death.

#### CONCLUSION



The world's biggest killers are Cardiovascular disease responsible for 30% of the world's total deaths. Since 1990, the largest increase in deaths has been for this disease. Neoplasms and chronic respiratory disease are the 2nd and 3rd leading causes of death, responsible for approximately 16% and 7% of total deaths respectively.

Lower respiratory infections remained the world's most deadly communicable disease, ranked as the 4th leading cause of death and contributing approximately to 6% of total deaths.

Neonatal disorders are ranked 5th.

Diarhea and digestive diseases rank 6 and 7<sup>th</sup> repectively.

In 2019, Alzheimer's disease and other forms of dementia ranked as the 7th leading cause of death. Women are disproportionately affected. Globally, 65% of deaths from Alzheimer's and other forms of dementia are women.

Diabetes, Cirhosis and HIV/AIDS have entered top 10 contributors in deaths around the world.

Countries having largest population such as China, India, United States, Russia and many others inclusing Japan and Indonesia contribute to maximum number of deaths.

Major contributors in total number of deaths are Alzheimer's disease and other dimentias Parkinson's disease drug use disorders cardiovascular diseases alcohol used disorders sel form environmental heat and cold exposure Neoplasms diabetes mellitus chronic kidney disease road injuries chronic respiratory diseases cirrhosis and other chronic liver diseases and digestive diseases.

With advancement in technology and increase in population year by year, we need to focus on finding cure	?S
for these diseases and maximum contributors to death.	

\_\_\_\_\_