

# CAUSE OF DEATH



**Submitted by:-  
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## 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.

## PROBLEM STATEMENT

THIS CONTAINS THE PROBLEM STATEMENT AND BUSINESS GOAL

# STATEMENT

- 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.

# EXPLORATORY DATA ANALYSIS

## 1. COUNTRY/TERRITORY

### 01. Country/Territory

```
In [9]: df['Country/Territory'].describe()
```

```
Out[9]: count      6120  
unique       204  
top    Afghanistan  
freq         30  
Name: Country/Territory, dtype: object
```



## 2. COUNTRY/TERRITORY CONTAIN NOMINAL DATA IN TEXT FORMAT

```
In [11]: #checking unique of variable
print(df['Country/Territory'].unique())
#counting the uniques
print(df['Country/Territory'].value_counts())
```

['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' 'Seychelles' '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']

Afghanistan	30
Papua New Guinea	30
Niue	30
North Korea	30
North Macedonia	30
..	..
Greenland	30
Grenada	30
Guam	30
Guatemala	30
Zimbabwe	30

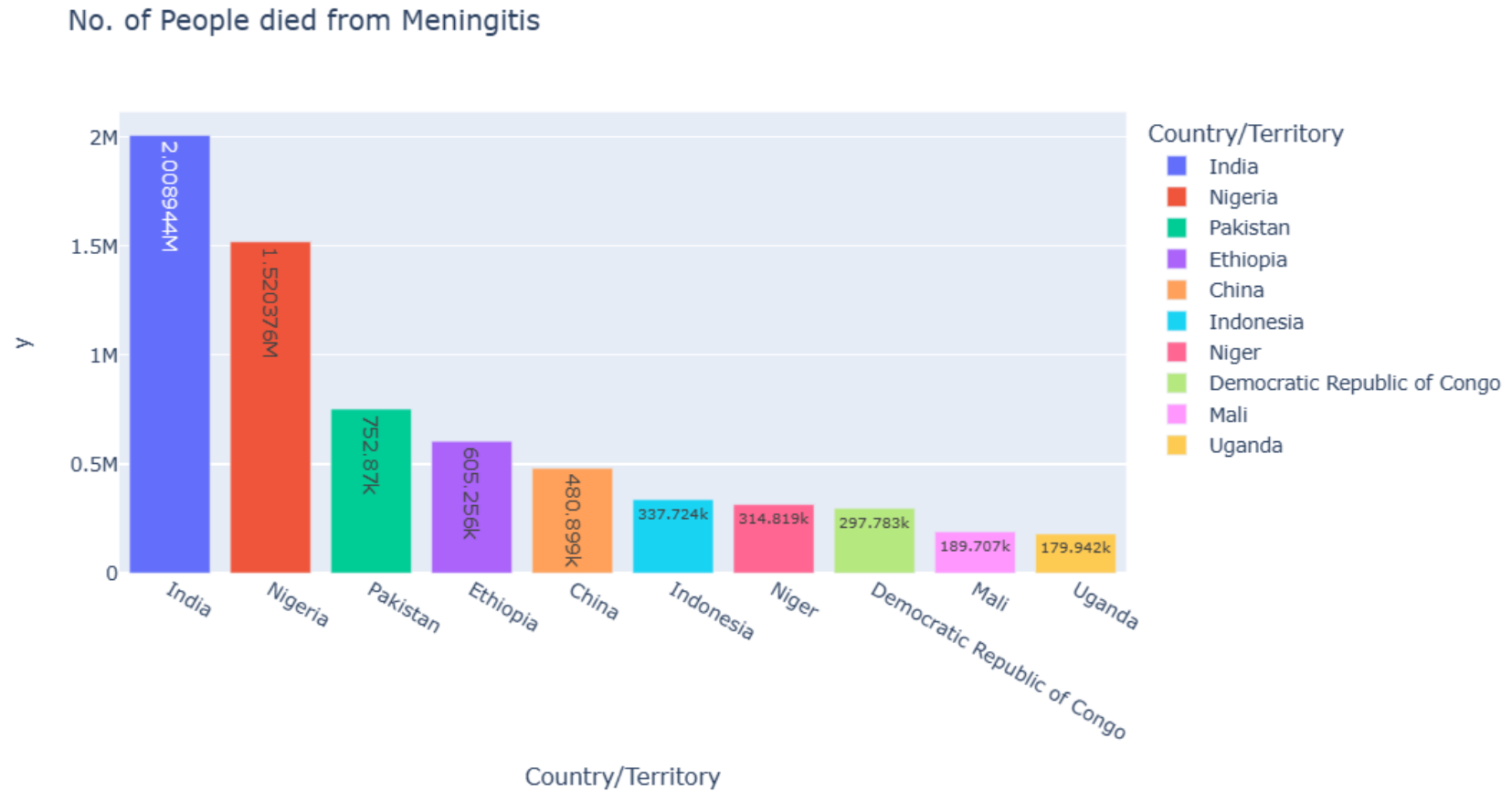
Name: Country/Territory, Length: 204, dtype: int64

### 03. YEAR- YEAR OF THE INCIDENT

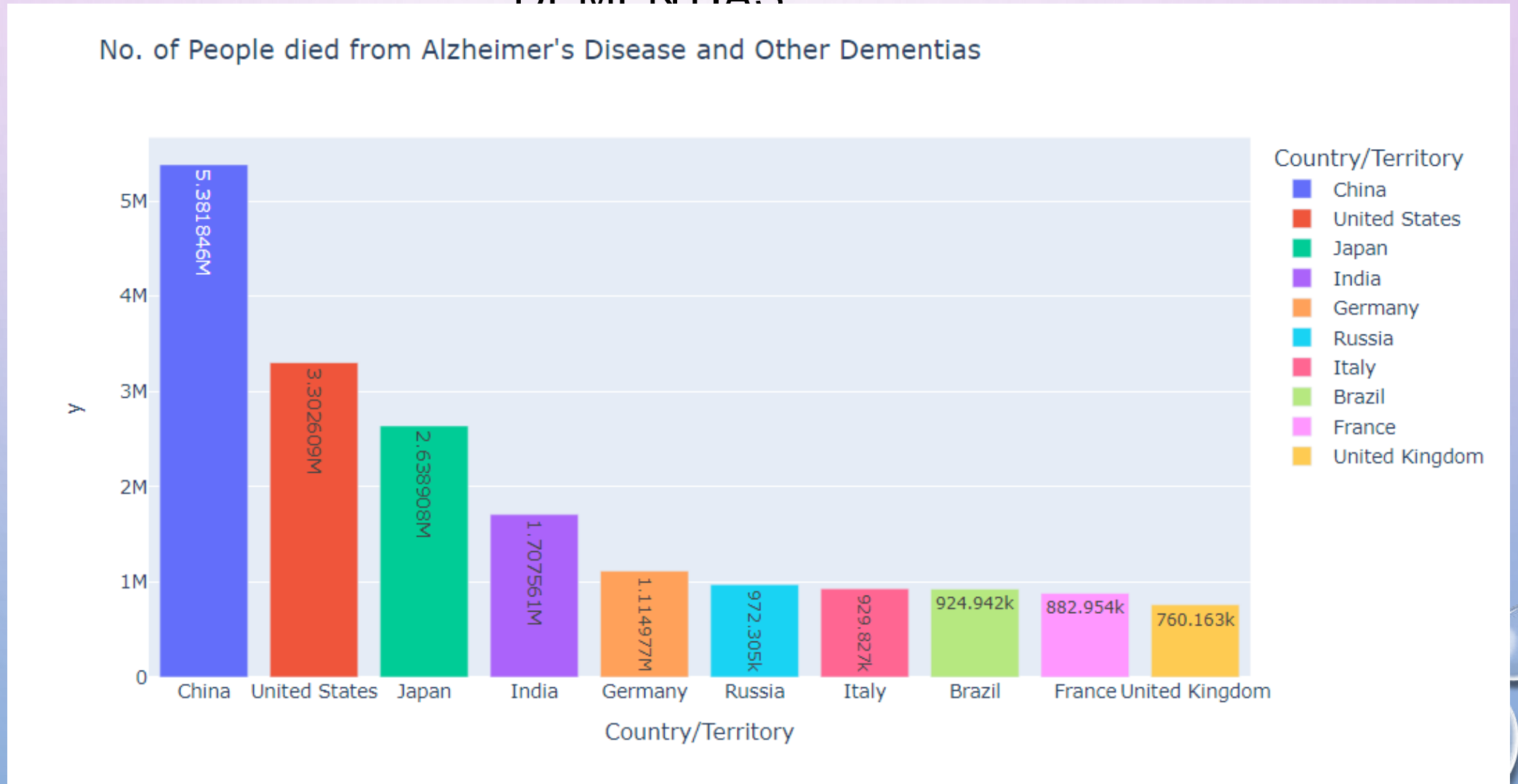
```
In [12]: df['Year'].describe()
```

```
Out[12]: count    6120.000000  
         mean     2004.500000  
         std       8.656149  
         min     1990.000000  
         25%     1997.000000  
         50%     2004.500000  
         75%     2012.000000  
         max     2019.000000  
         Name: Year, dtype: float64
```

## 04. MENINGITIS - NO. OF PEOPLE DIED FROM MENINGITIS

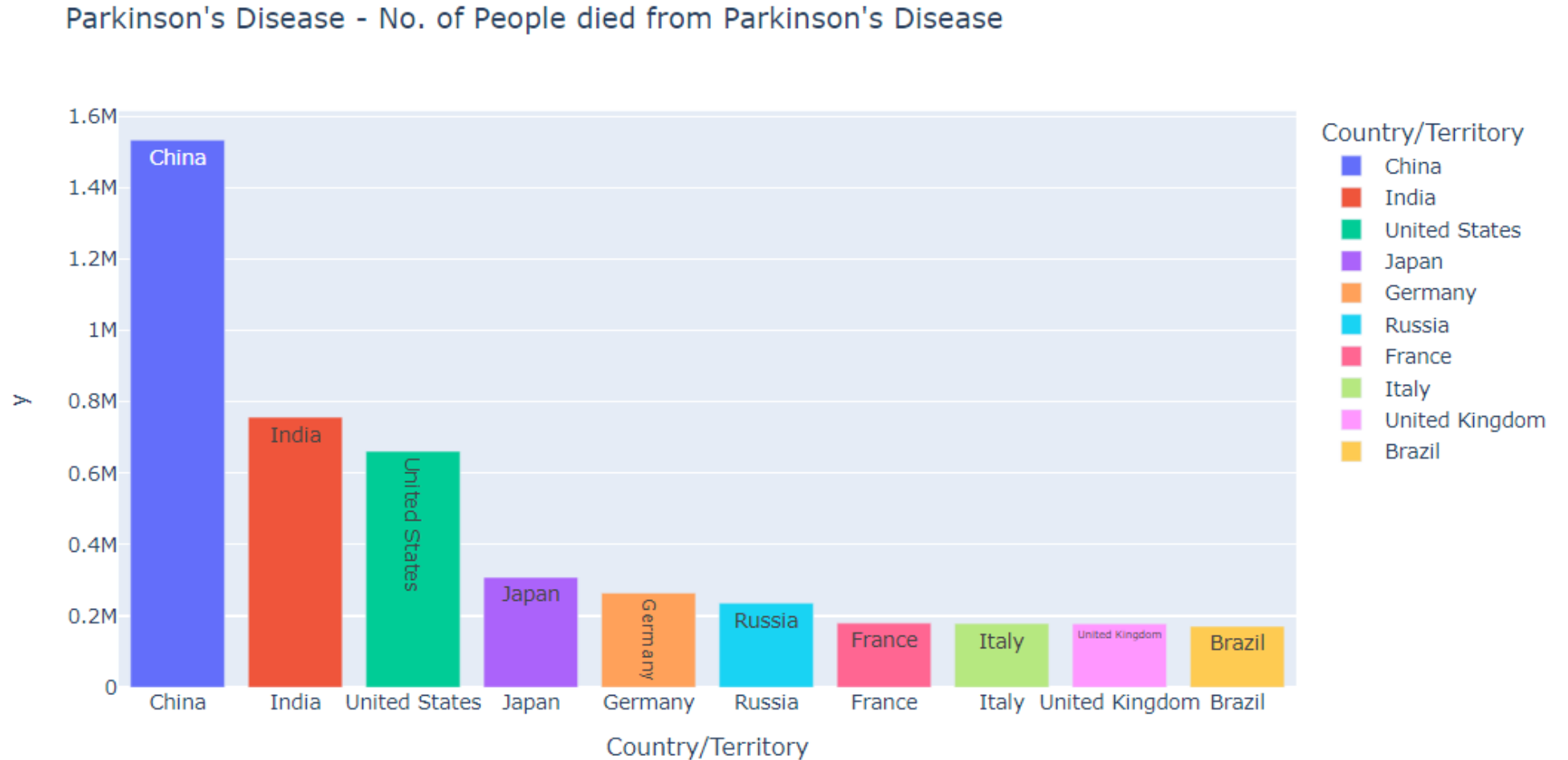


## 05. ALZHEIMER'S DISEASE AND OTHER DEMENTIAS - NO. OF PEOPLE DIED FROM ALZHEIMER'S DISEASE AND OTHER DEMENTIAS

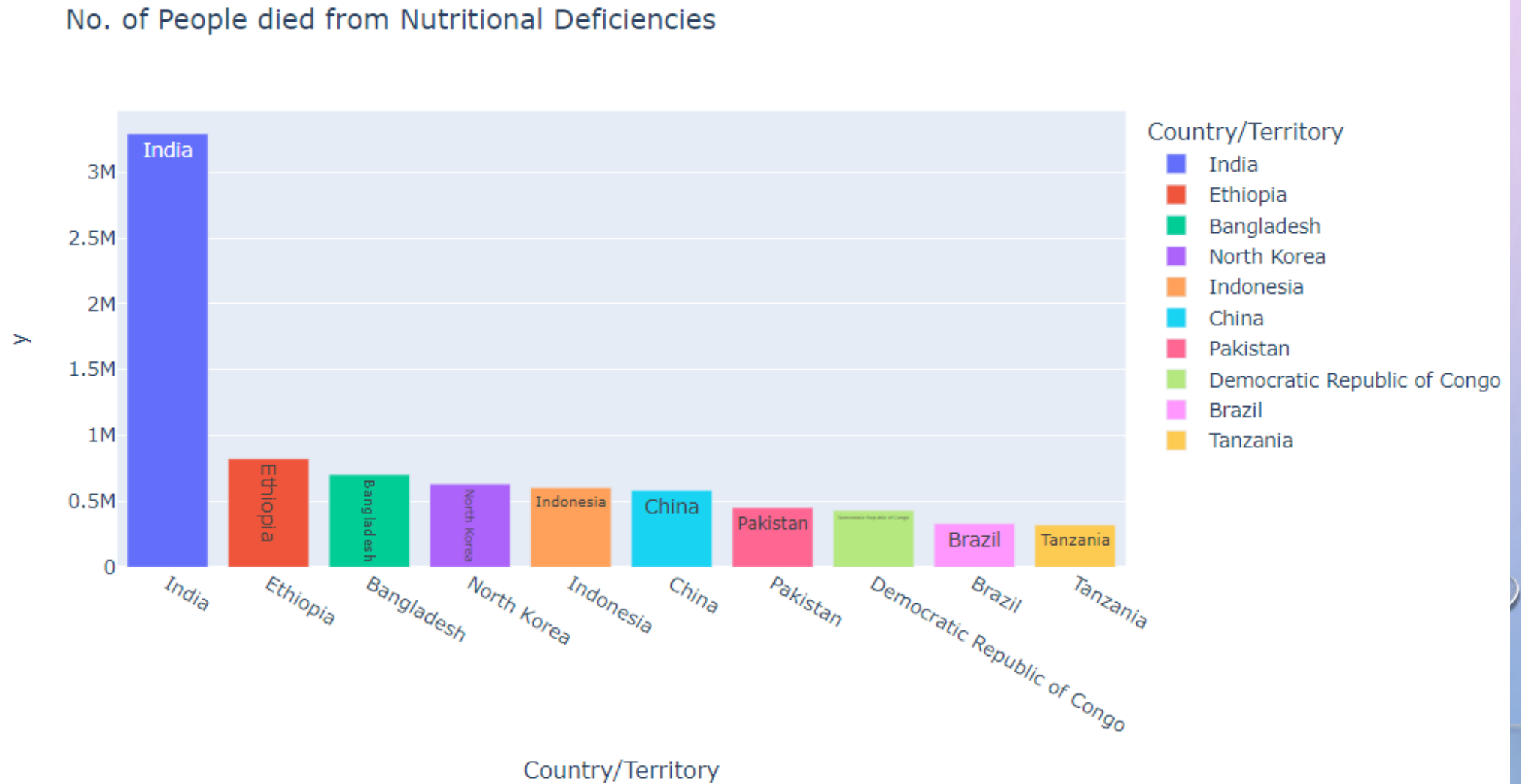




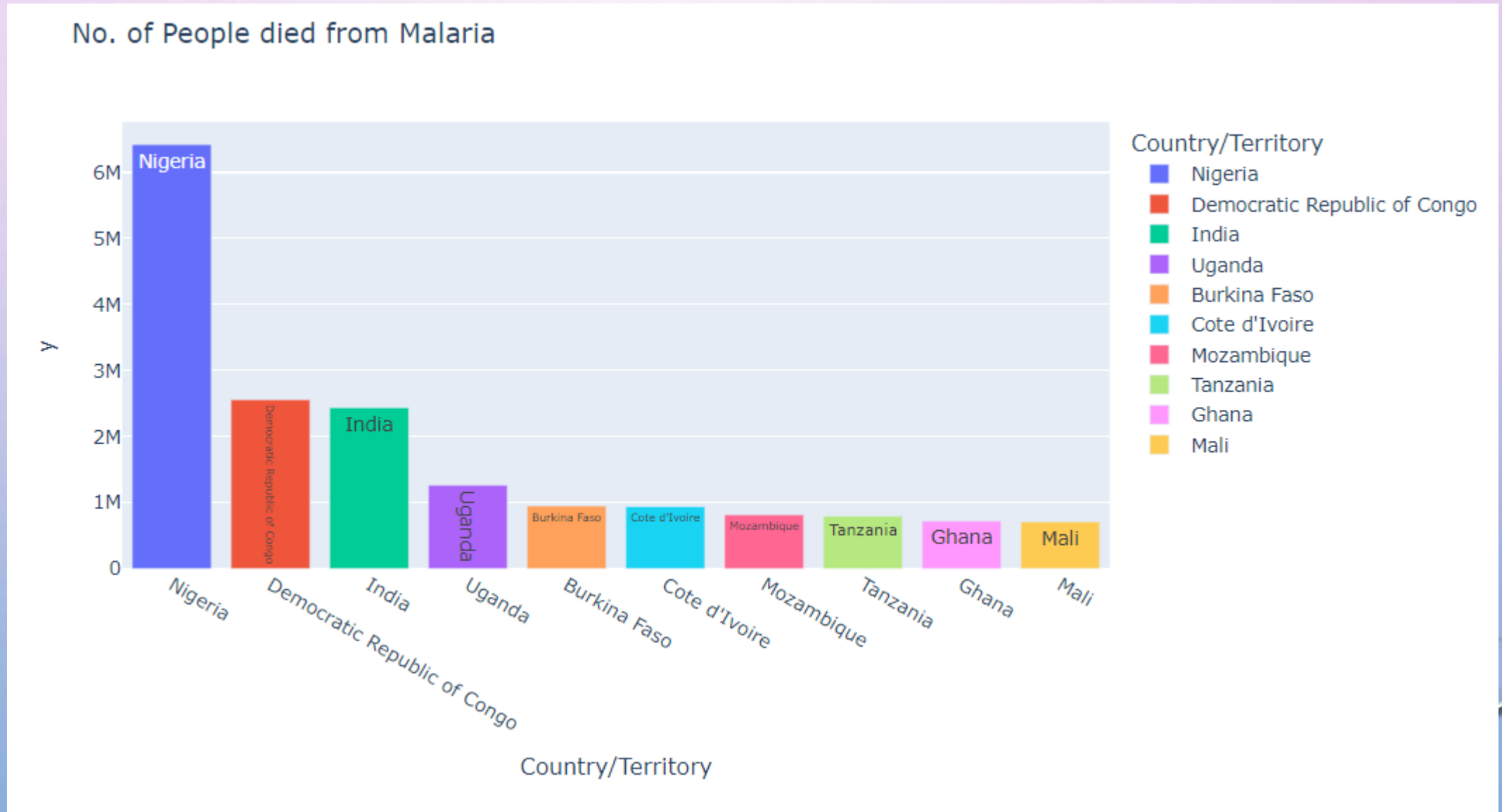
## 06. PARKINSON'S DISEASE - NO. OF PEOPLE DIED FROM PARKINSON'S DISEASE



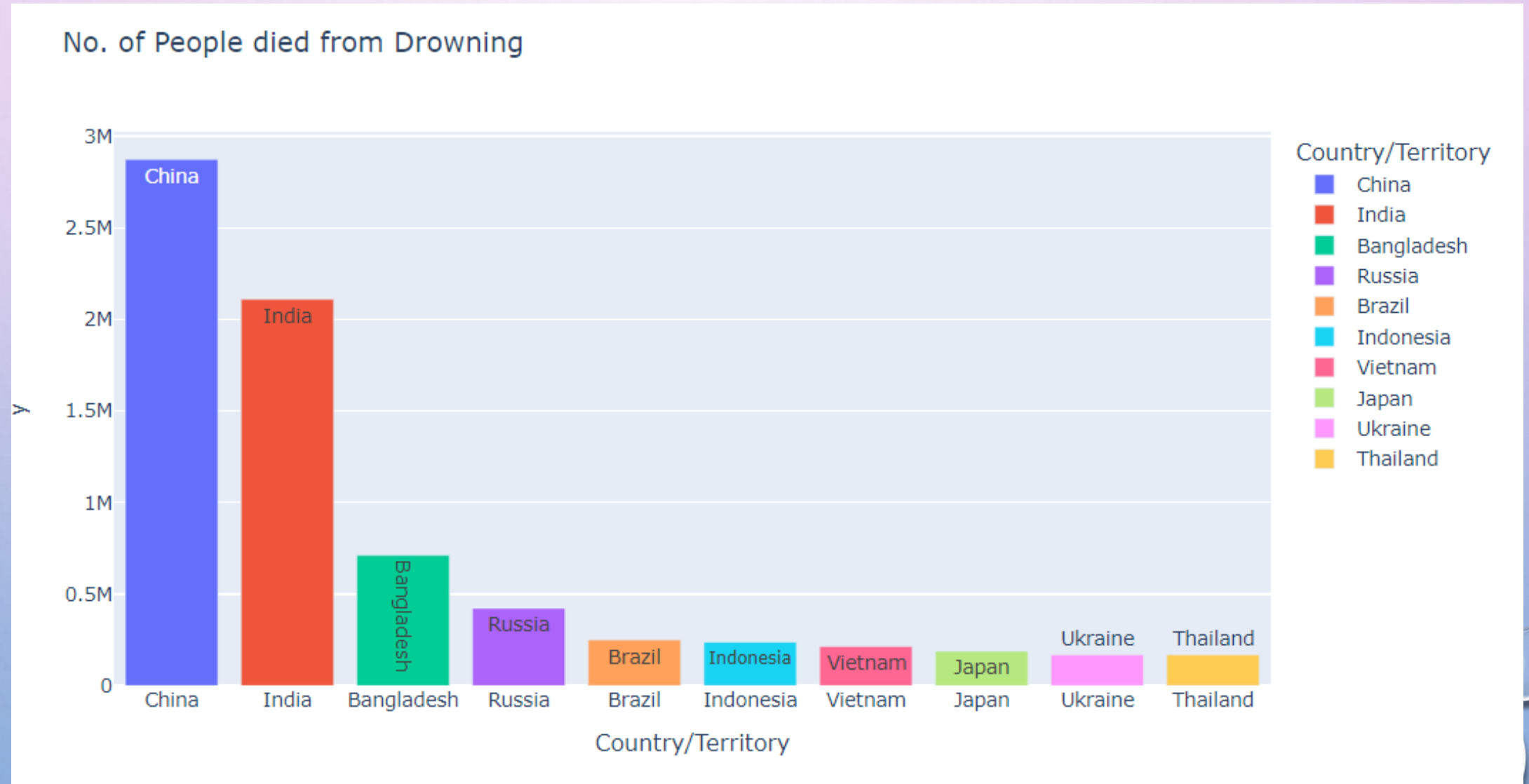
## 07. NUTRITIONAL DEFICIENCIES - NO. OF PEOPLE DIED FROM NUTRITIONAL DEFICIENCIES



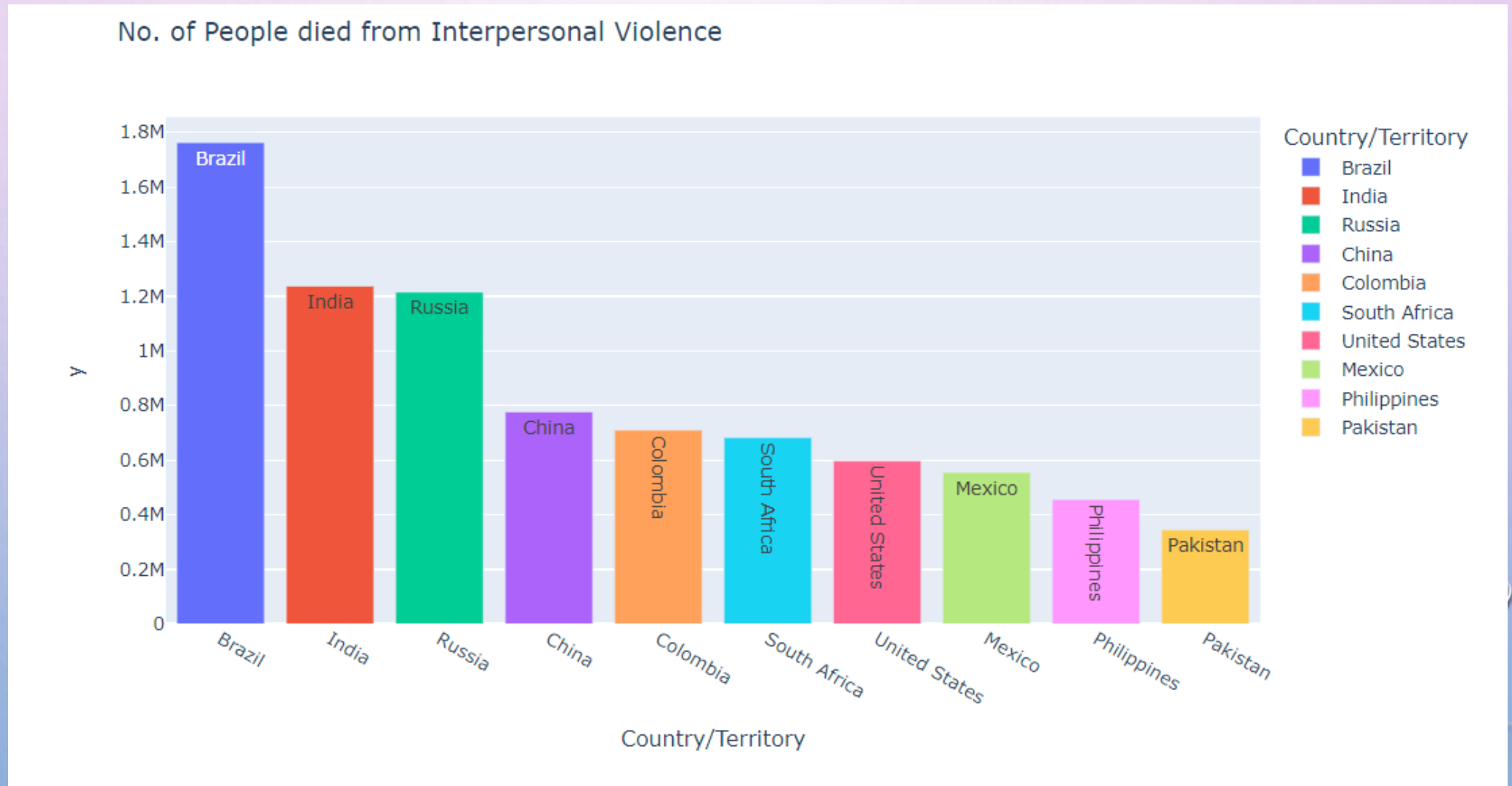
## 08. MALARIA - NO. OF PEOPLE DIED FROM MALARIA



## 09. DROWNING - NO. OF PEOPLE DIED FROM DROWNING

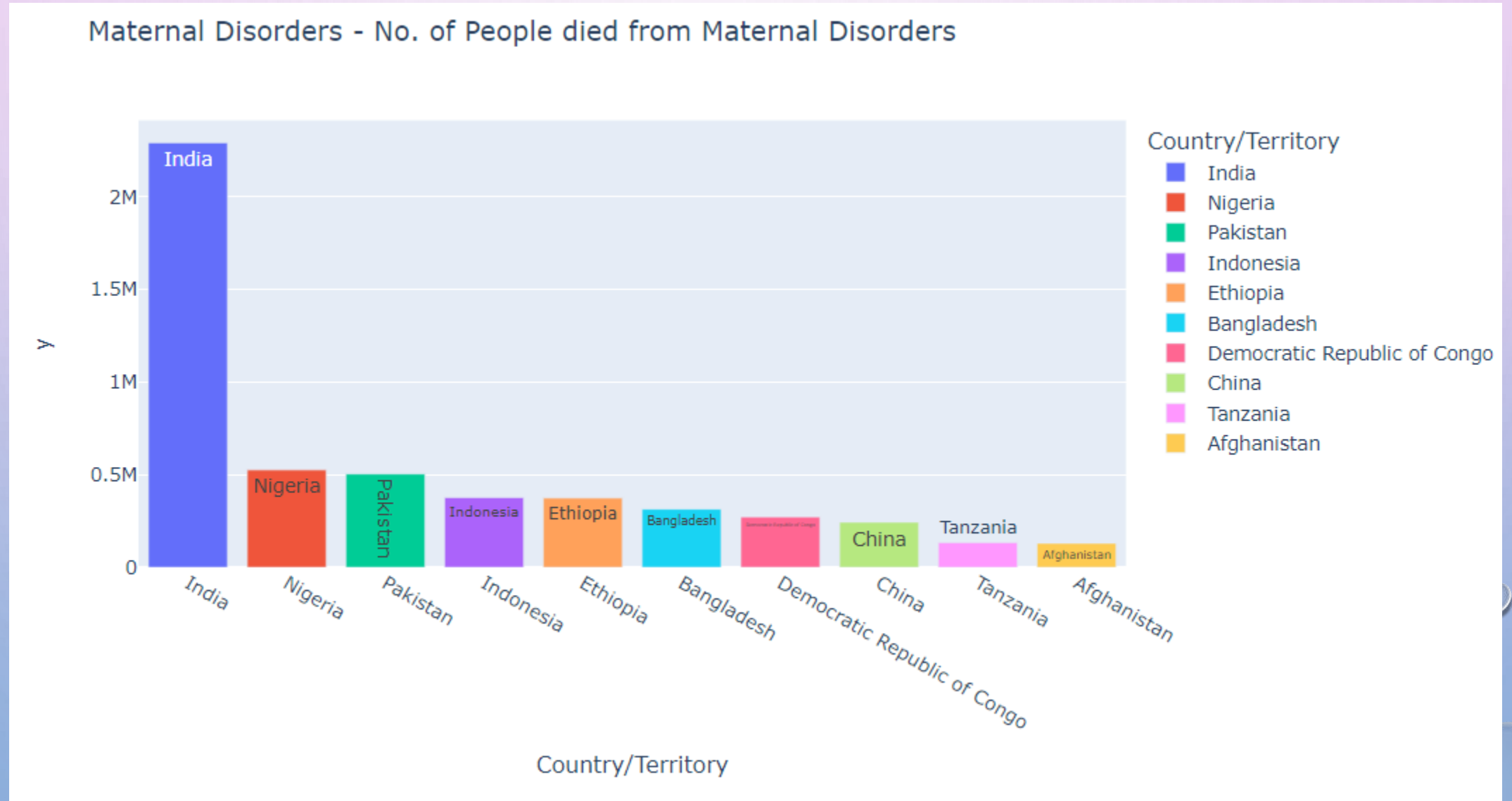


## 10. INTERPERSONAL VIOLENCE - NO. OF PEOPLE DIED FROM INTERPERSONAL VIOLENCE

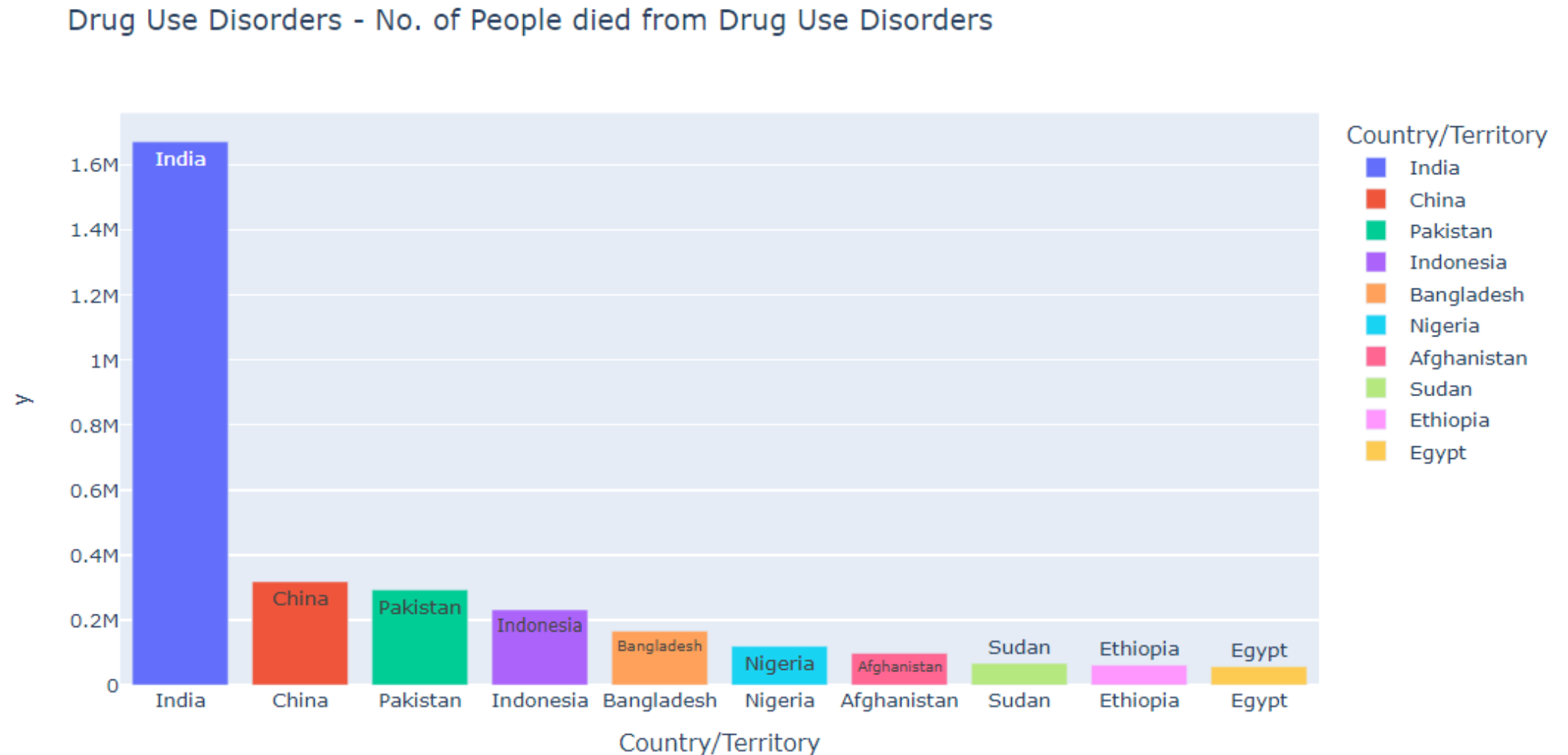




# 11. MATERNAL DISORDERS - NO. OF PEOPLE DIED FROM MATERNAL DISORDERS

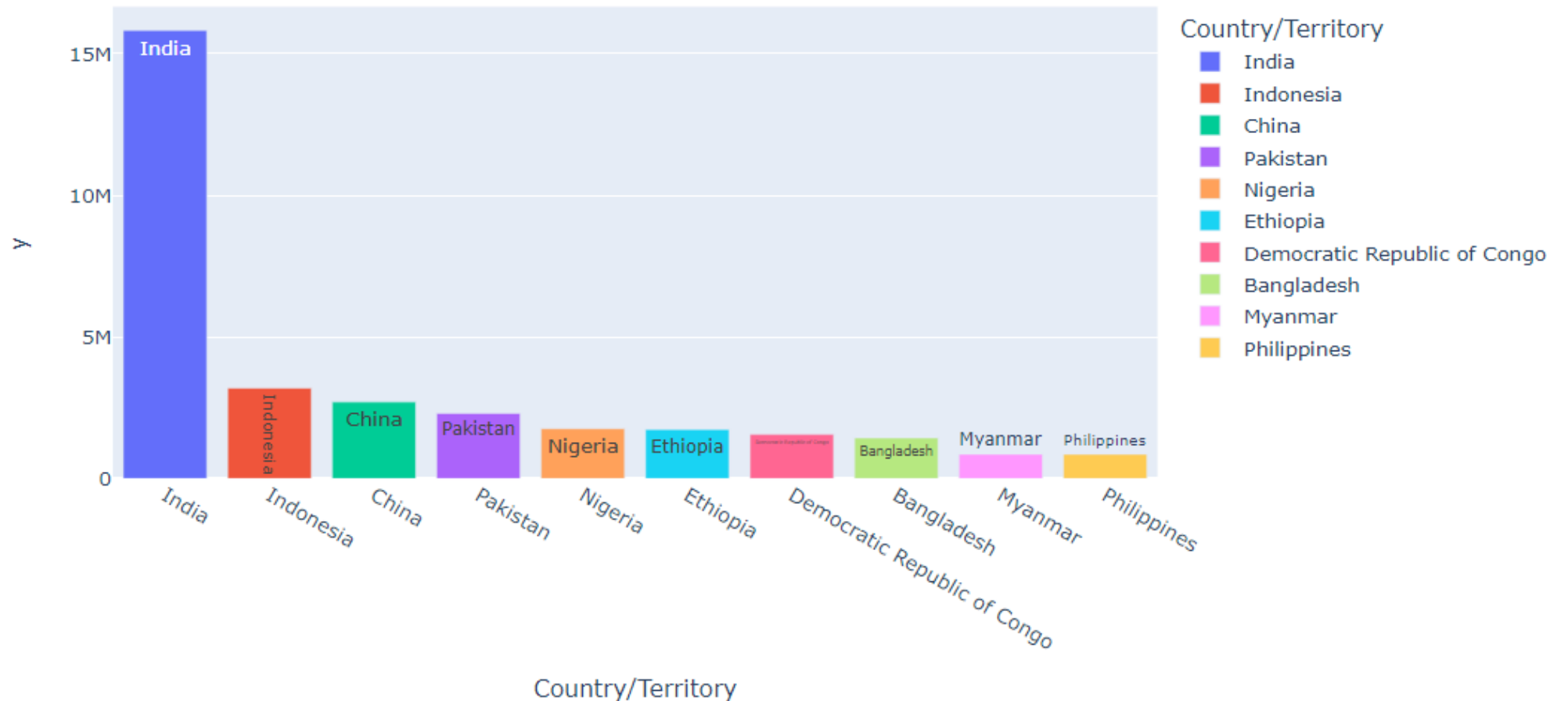


## 12. DRUG USE DISORDERS - NO. OF PEOPLE DIED FROM DRUG USE DISORDERS

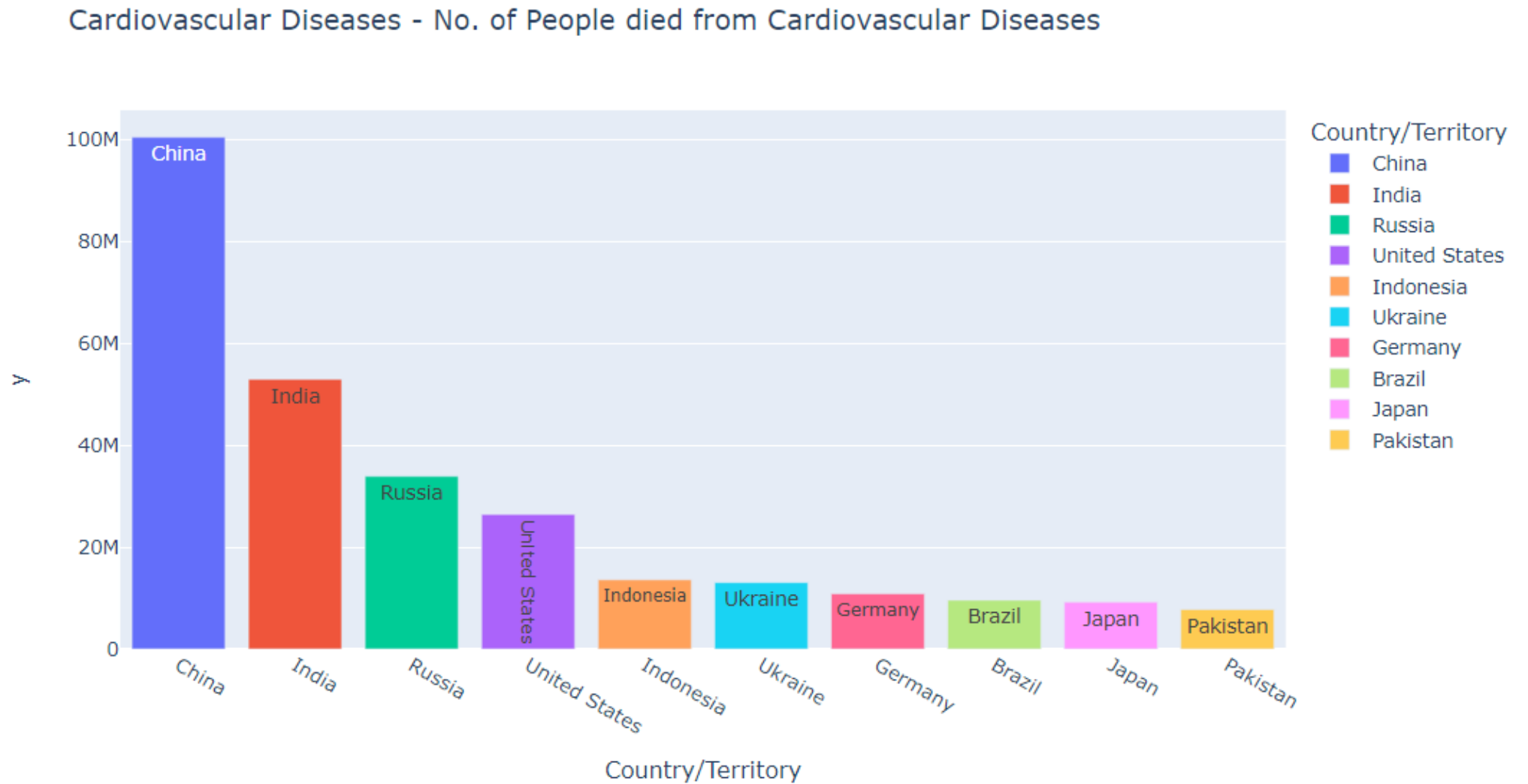


# 13. TUBERCULOSIS - NO. OF PEOPLE DIED FROM TUBERCULOSIS

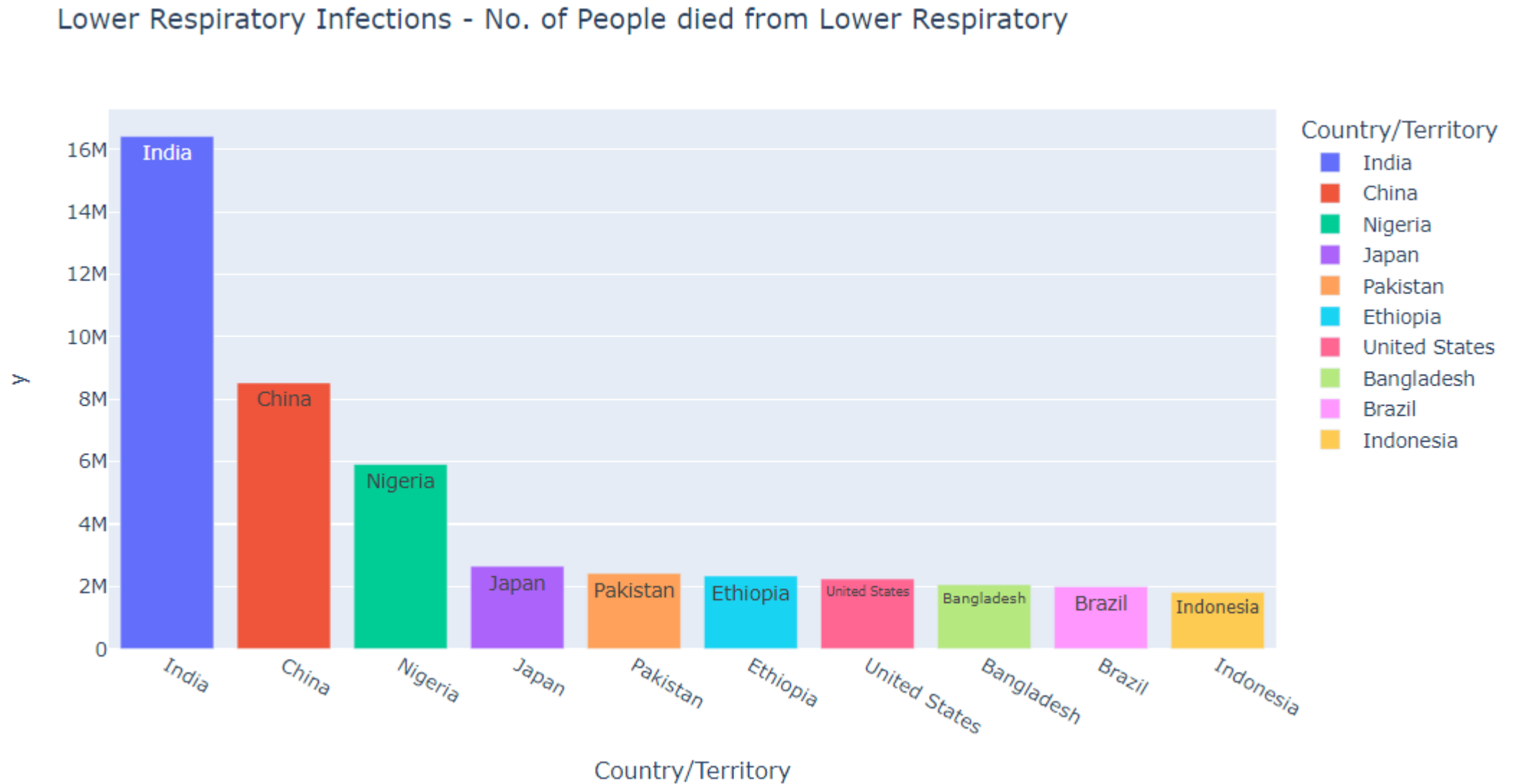
Tuberculosis - No. of People died from Tuberculosis



## 14. CARDIOVASCULAR DISEASES - NO. OF PEOPLE DIED FROM CARDIOVASCULAR DISEASES

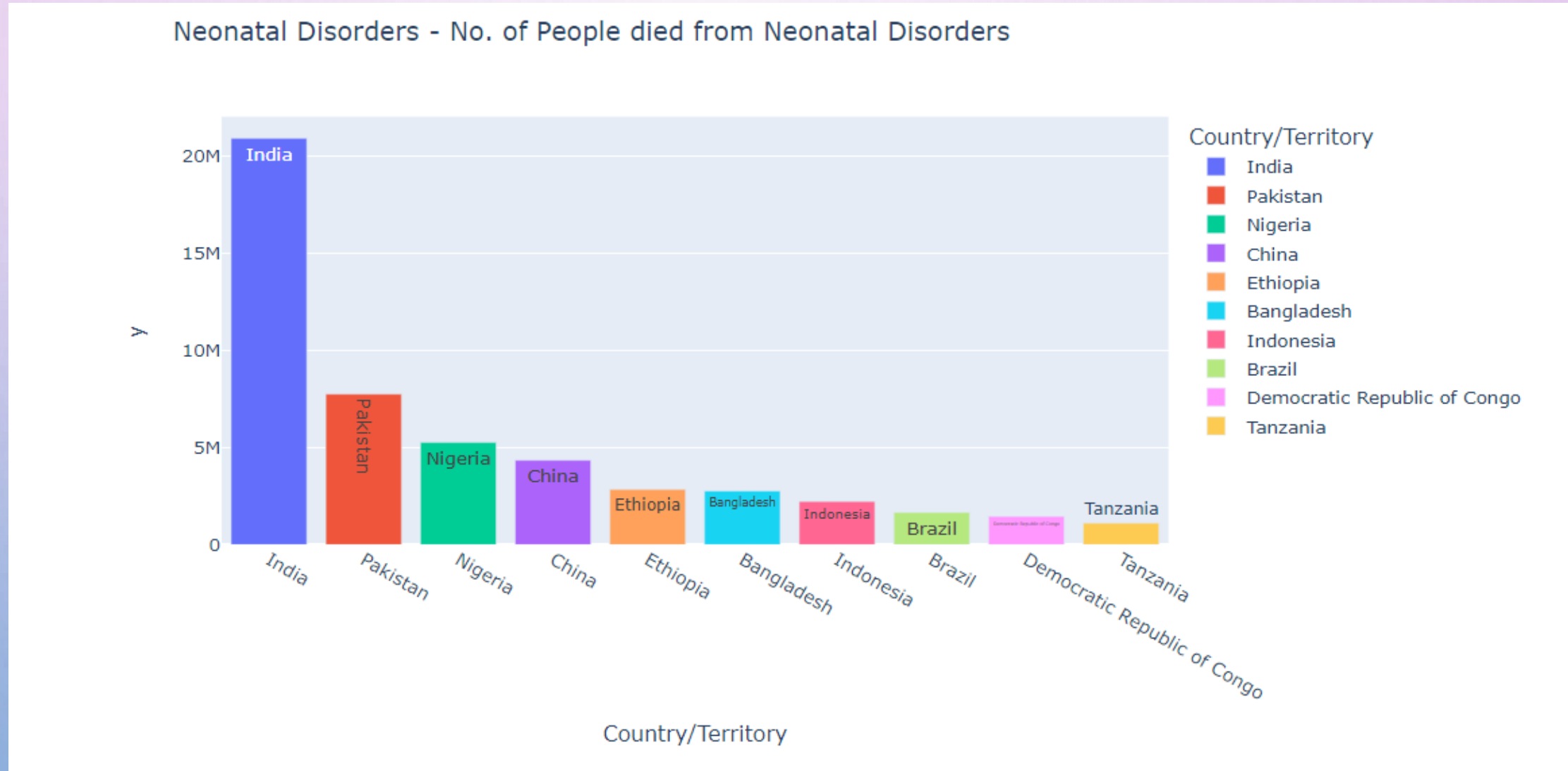


# 15. LOWER RESPIRATORY INFECTIONS - NO. OF PEOPLE DIED FROM LOWER RESPIRATORY INFECTIONS



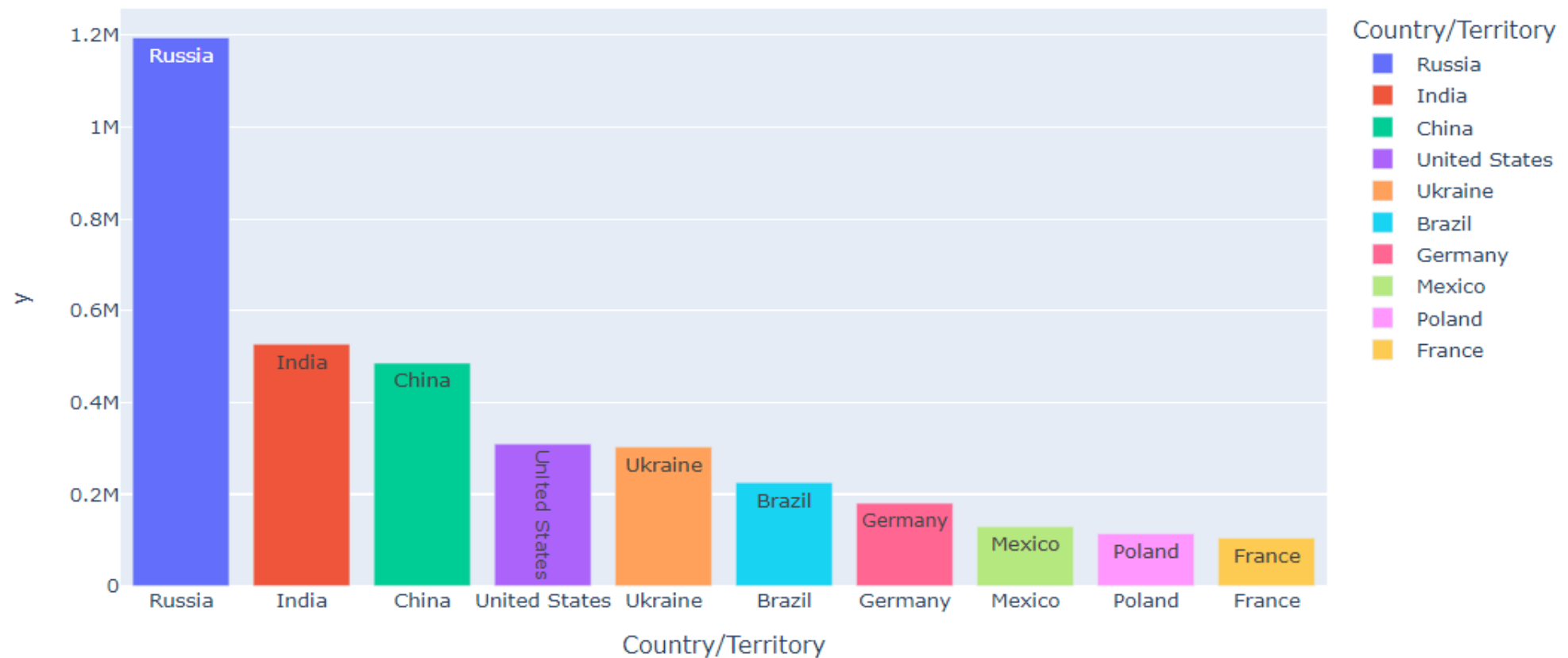


## 16. NEONATAL DISORDERS - NO. OF PEOPLE DIED FROM NEONATAL DISORDERS



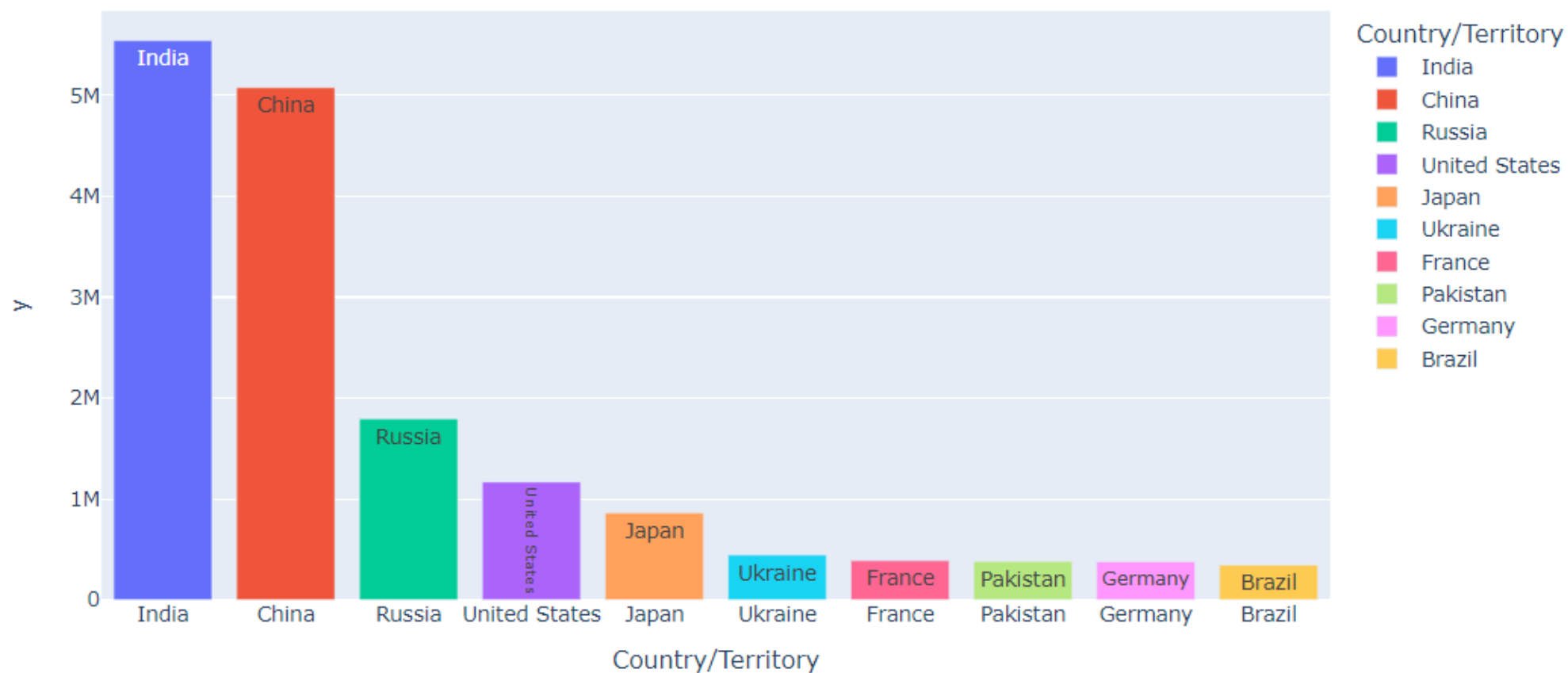
## 17. ALCOHOL USE DISORDERS - NO. OF PEOPLE DIED FROM ALCOHOL USE DISORDERS

Alcohol Use Disorders - No. of People died from Alcohol Use Disorders



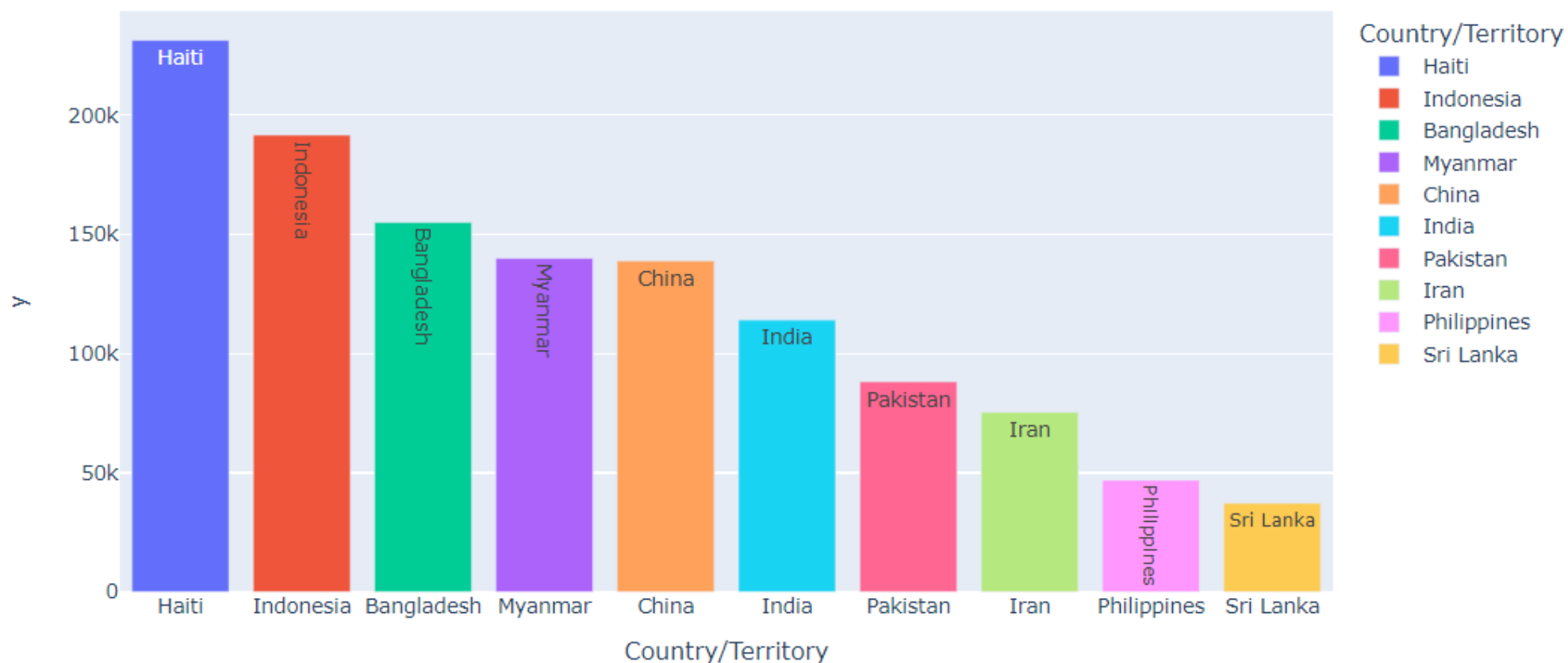
## 18. SELF-HARM - NO. OF PEOPLE DIED FROM SELF-HARM

Self-harm - No. of People died from Self-harm



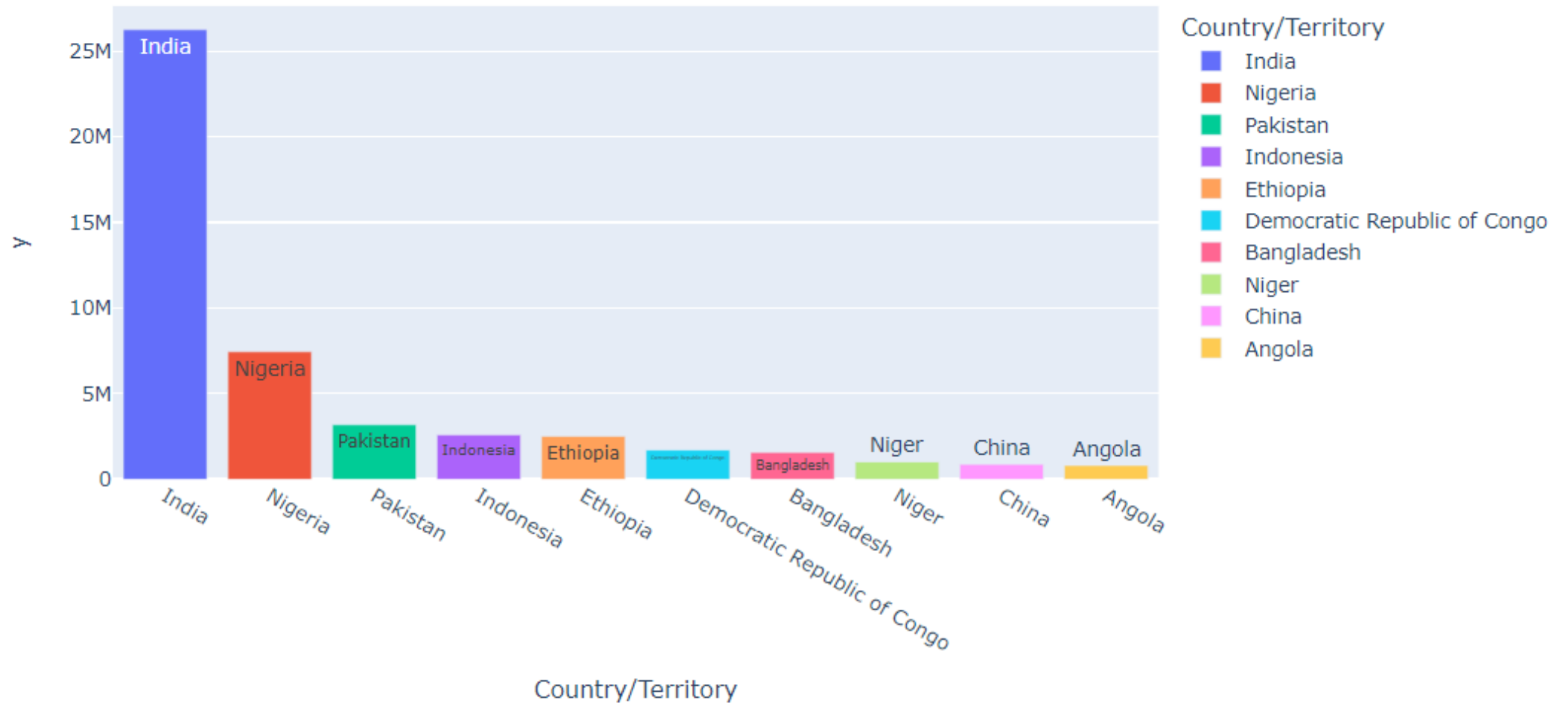
## 19. EXPOSURE TO FORCES OF NATURE - NO. OF PEOPLE DIED FROM EXPOSURE TO FORCES OF NATURE

Exposure to Forces of Nature - No. of People died from Exposure to Forces of Nature



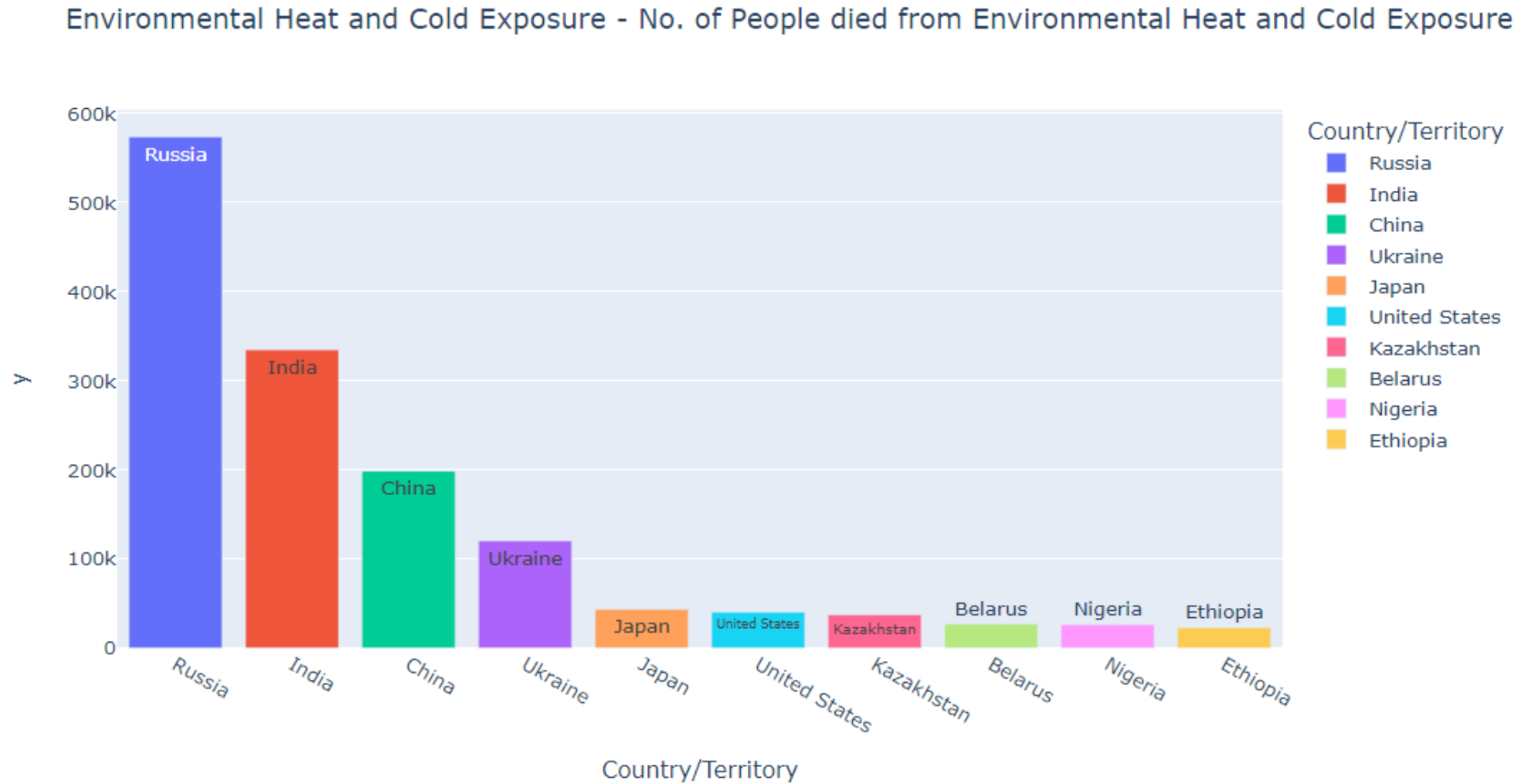
## 20. DIARRHEAL DISEASES - NO. OF PEOPLE DIED FROM DIARRHEAL DISEASES

Diarrheal Diseases - No. of People died from Diarrheal Diseases

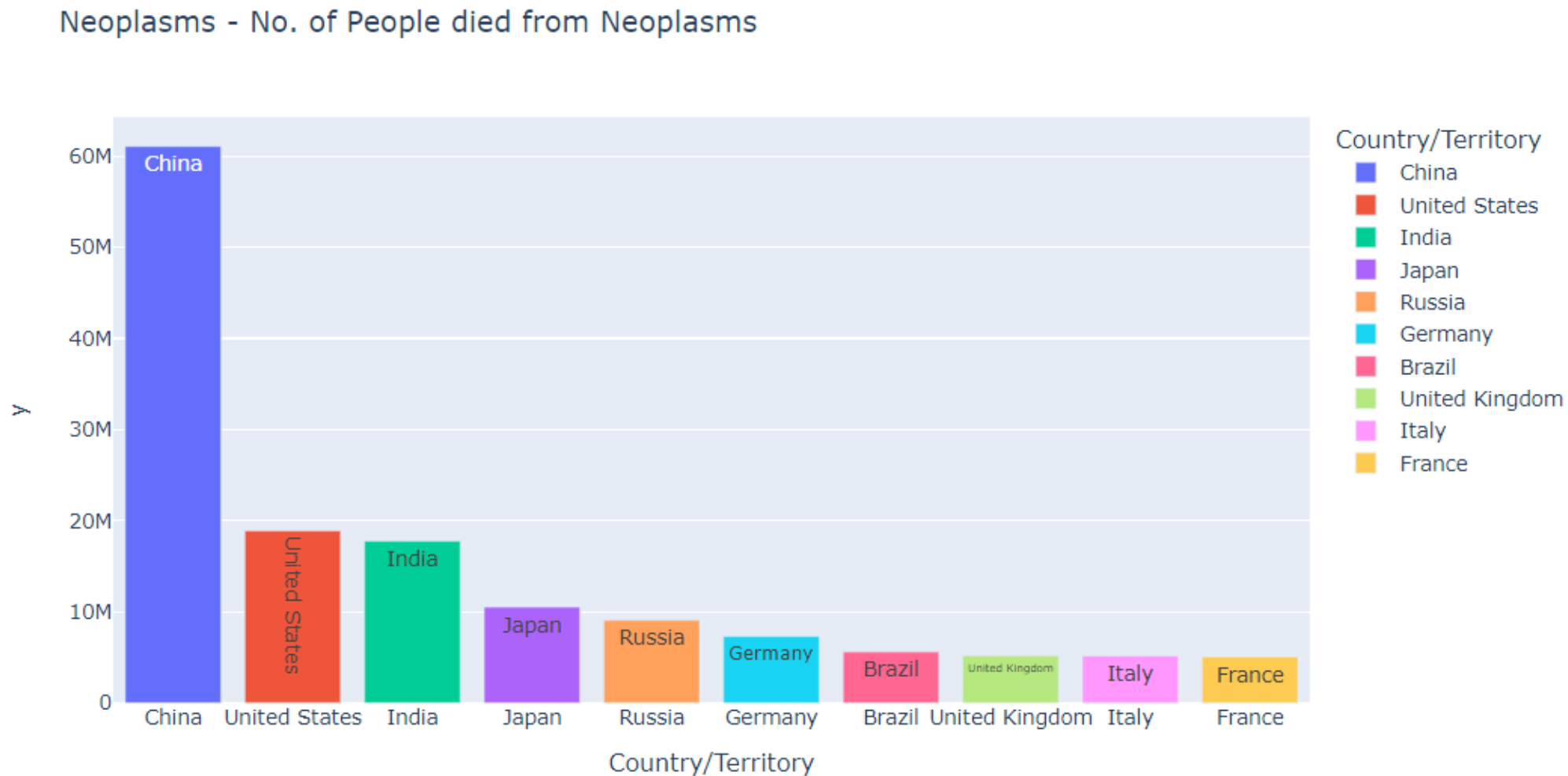




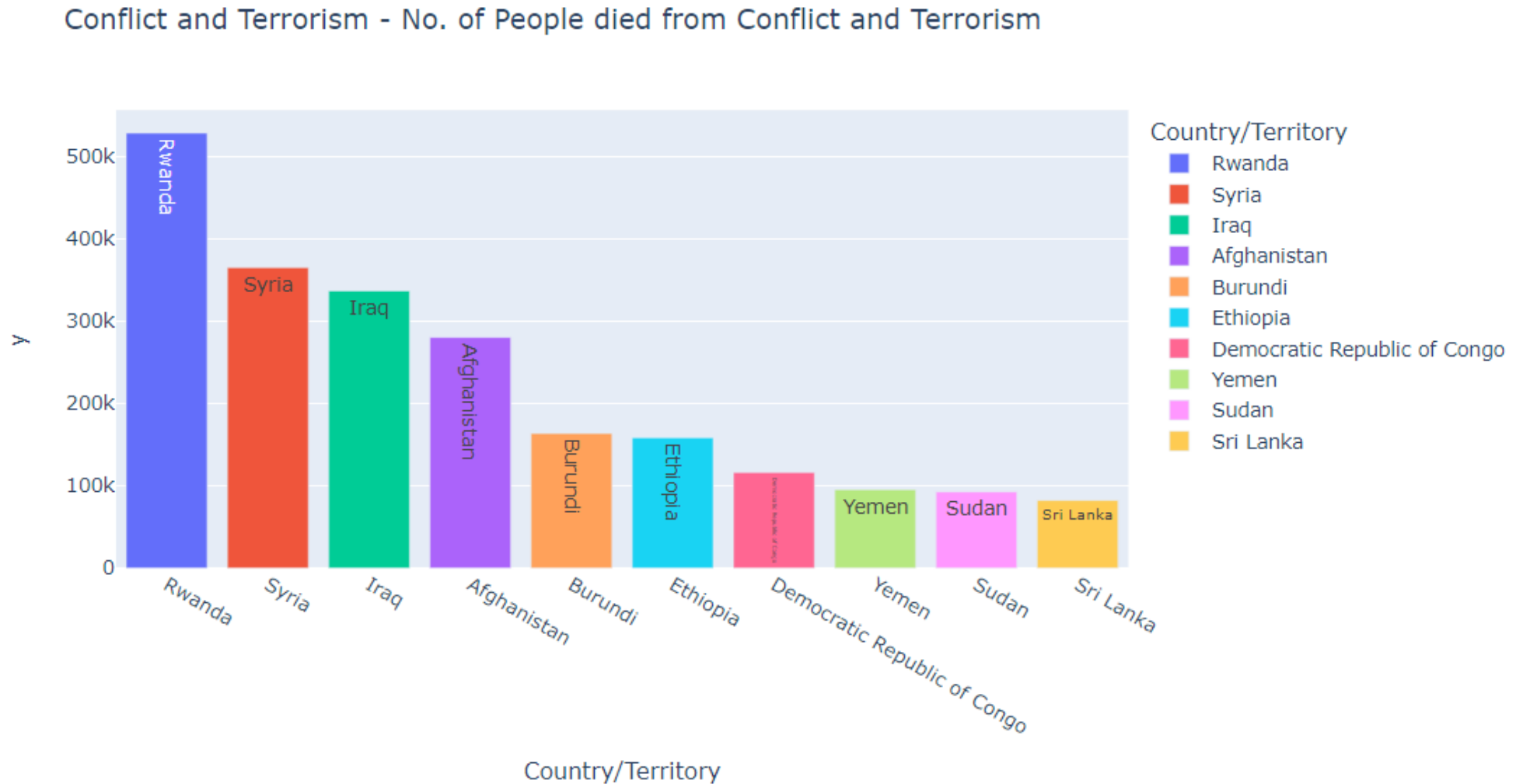
## 21. ENVIRONMENTAL HEAT AND COLD EXPOSURE - NO. OF PEOPLE DIED FROM ENVIRONMENTAL HEAT AND COLD EXPOSURE



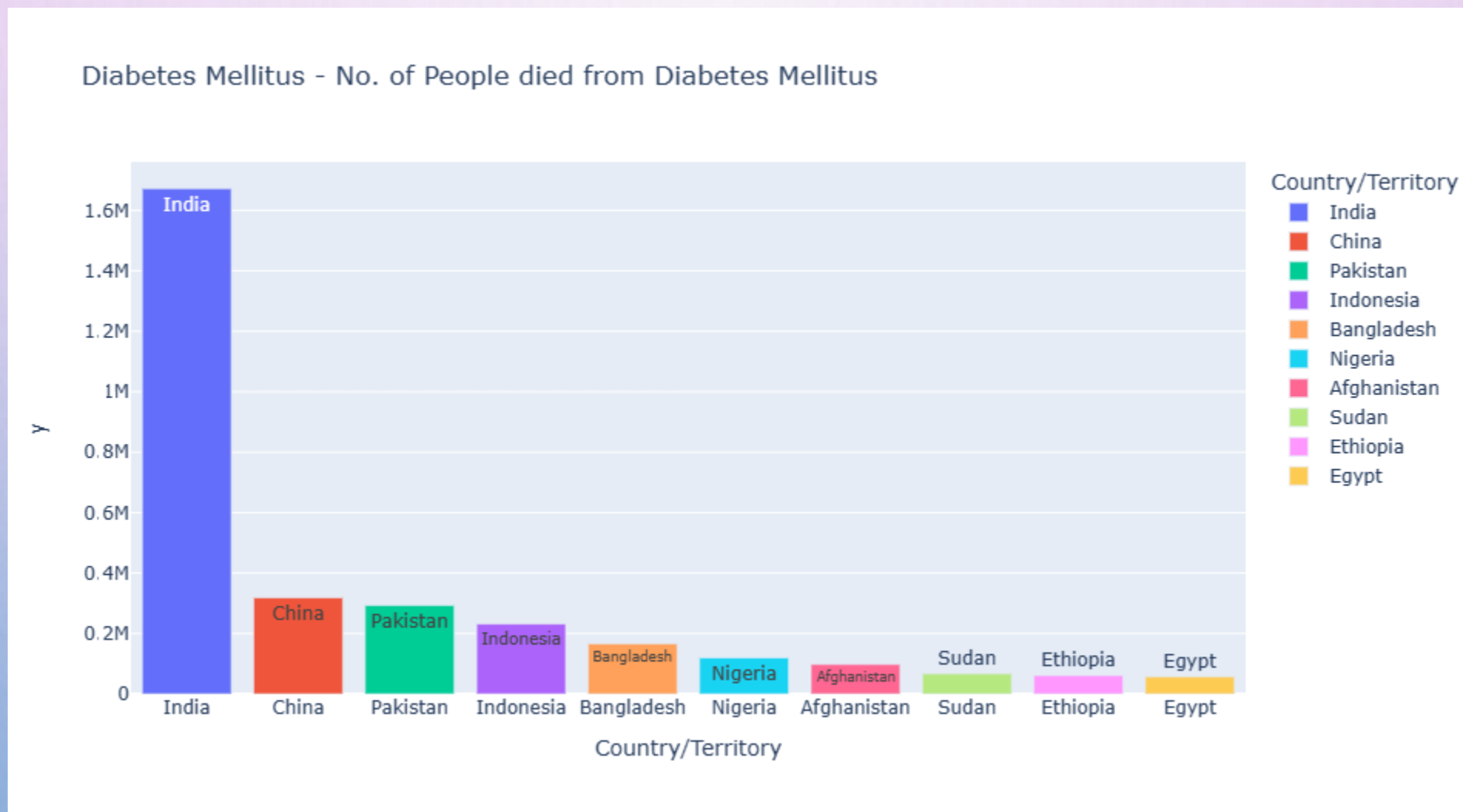
## 22. NEOPLASMS - NO. OF PEOPLE DIED FROM NEOPLASMS



## 23. CONFLICT AND TERRORISM - NO. OF PEOPLE DIED FROM CONFLICT AND TERRORISM

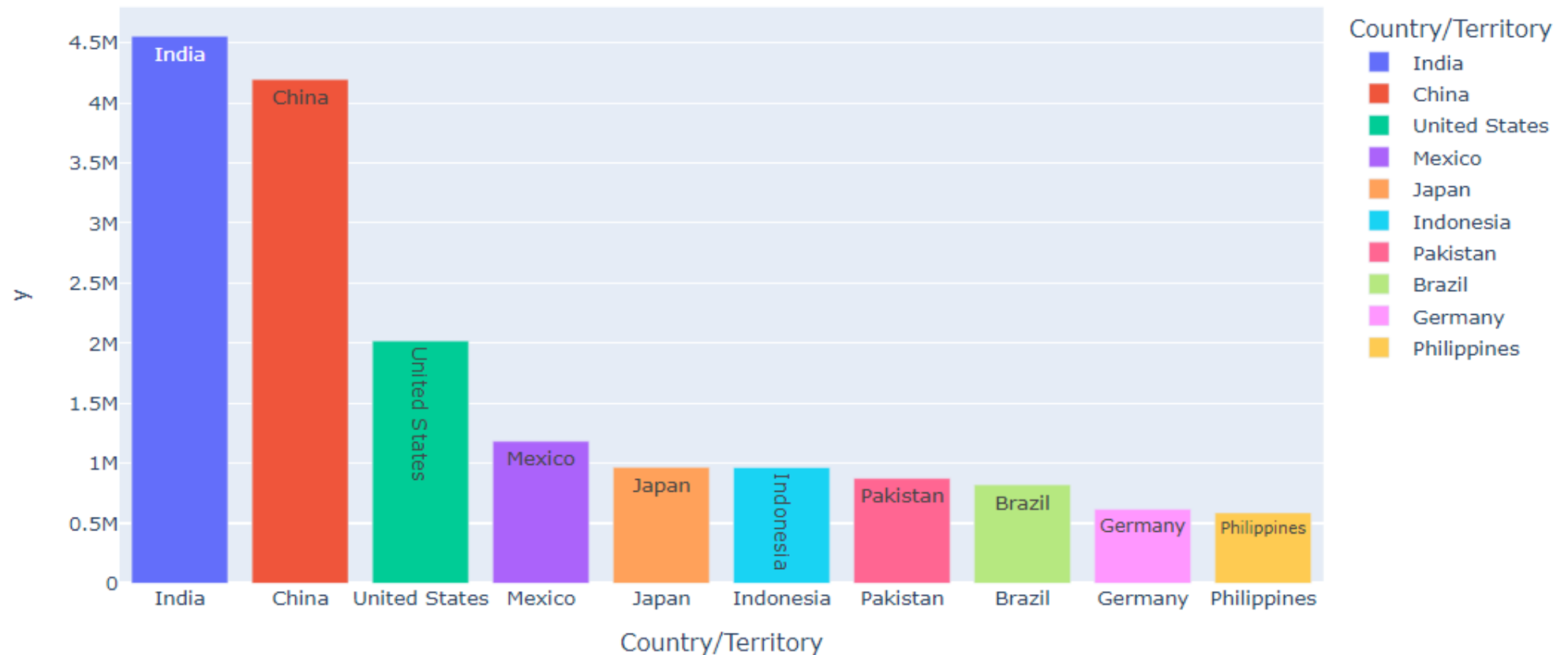


## 24. DIABETES MELLITUS - NO. OF PEOPLE DIED FROM DIABETES MELLITUS



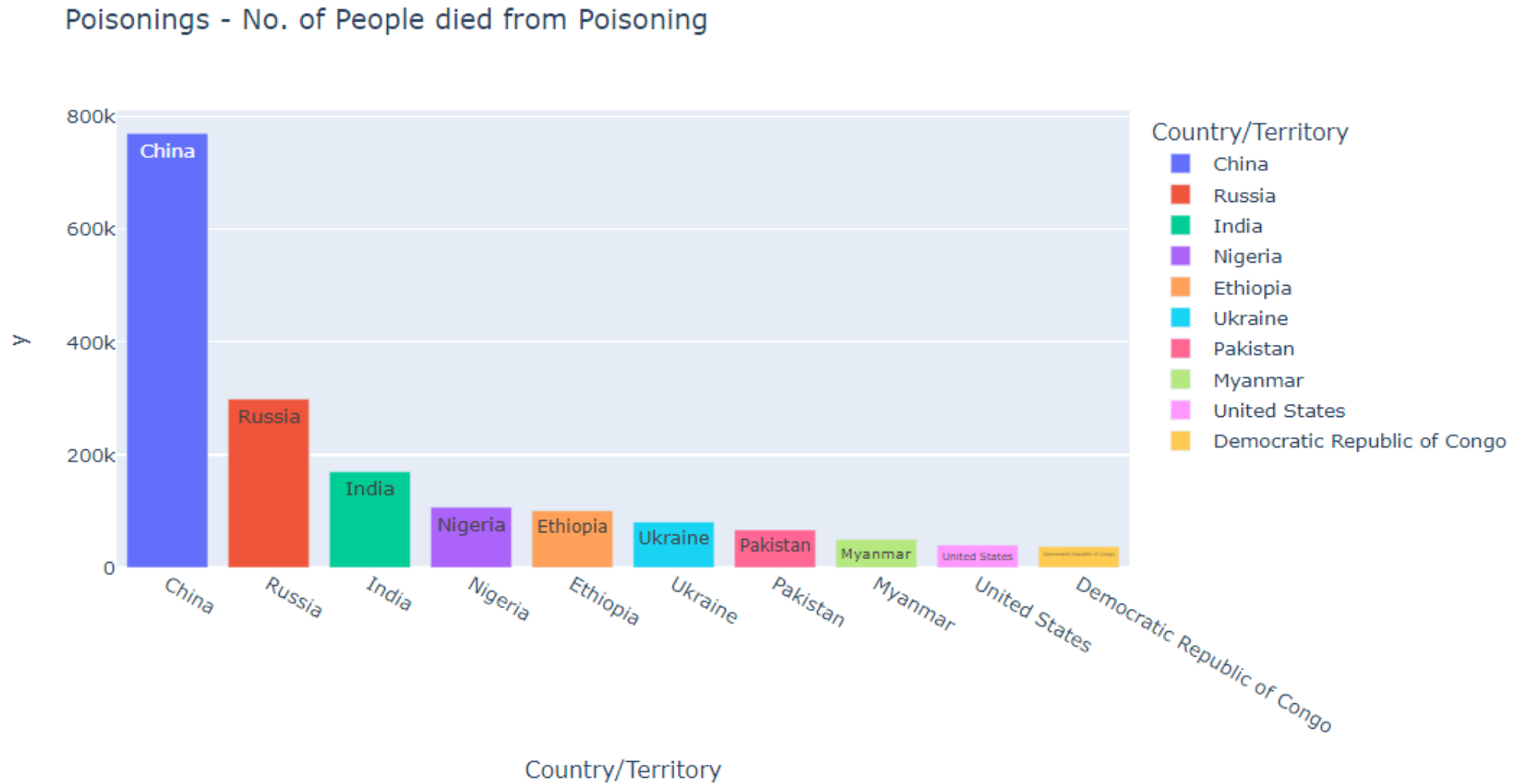
## 25. CHRONIC KIDNEY DISEASE - NO. OF PEOPLE DIED FROM CHRONIC KIDNEY DISEASE

Chronic Kidney Disease - No. of People died from Chronic Kidney Disease

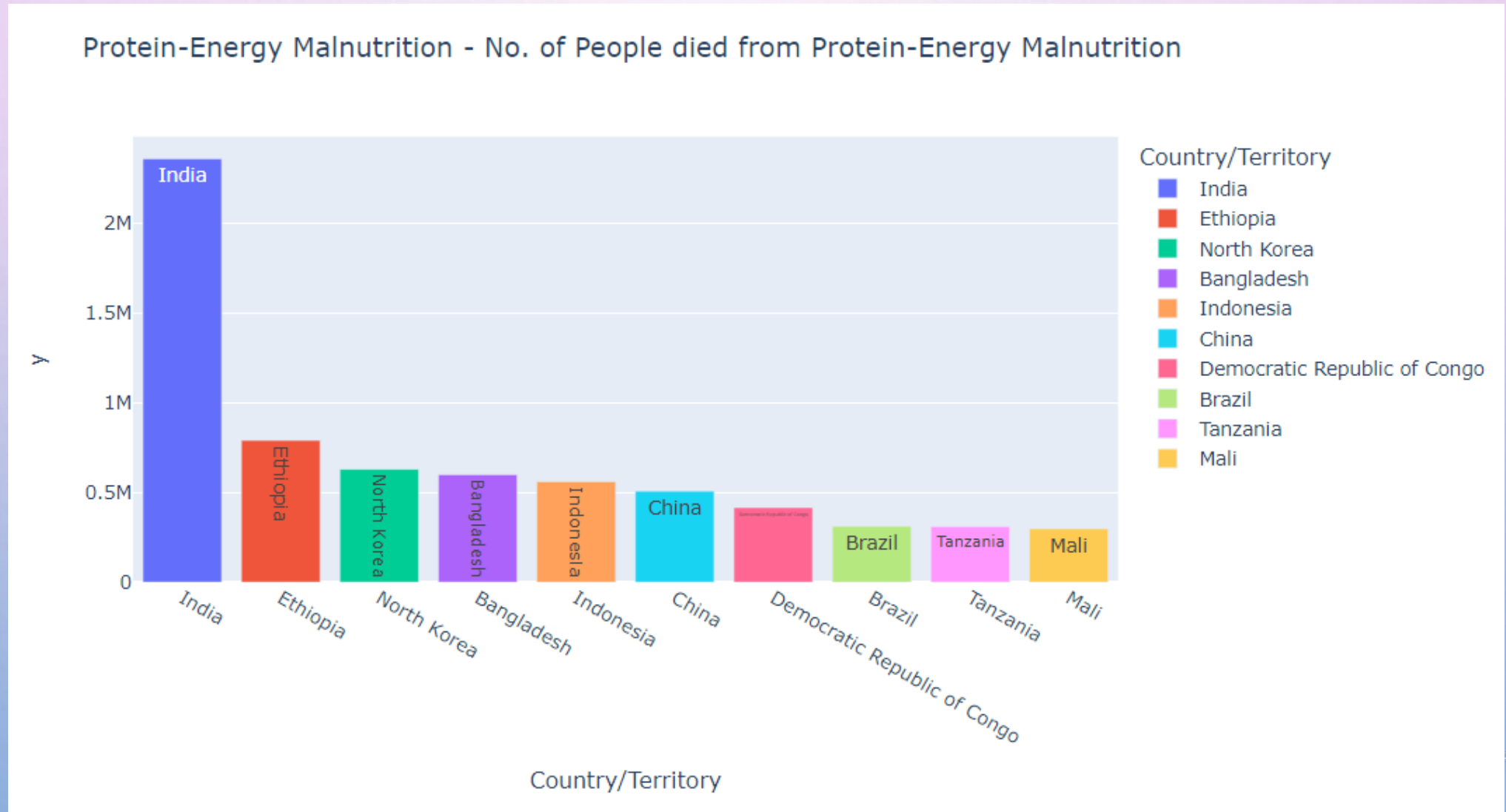




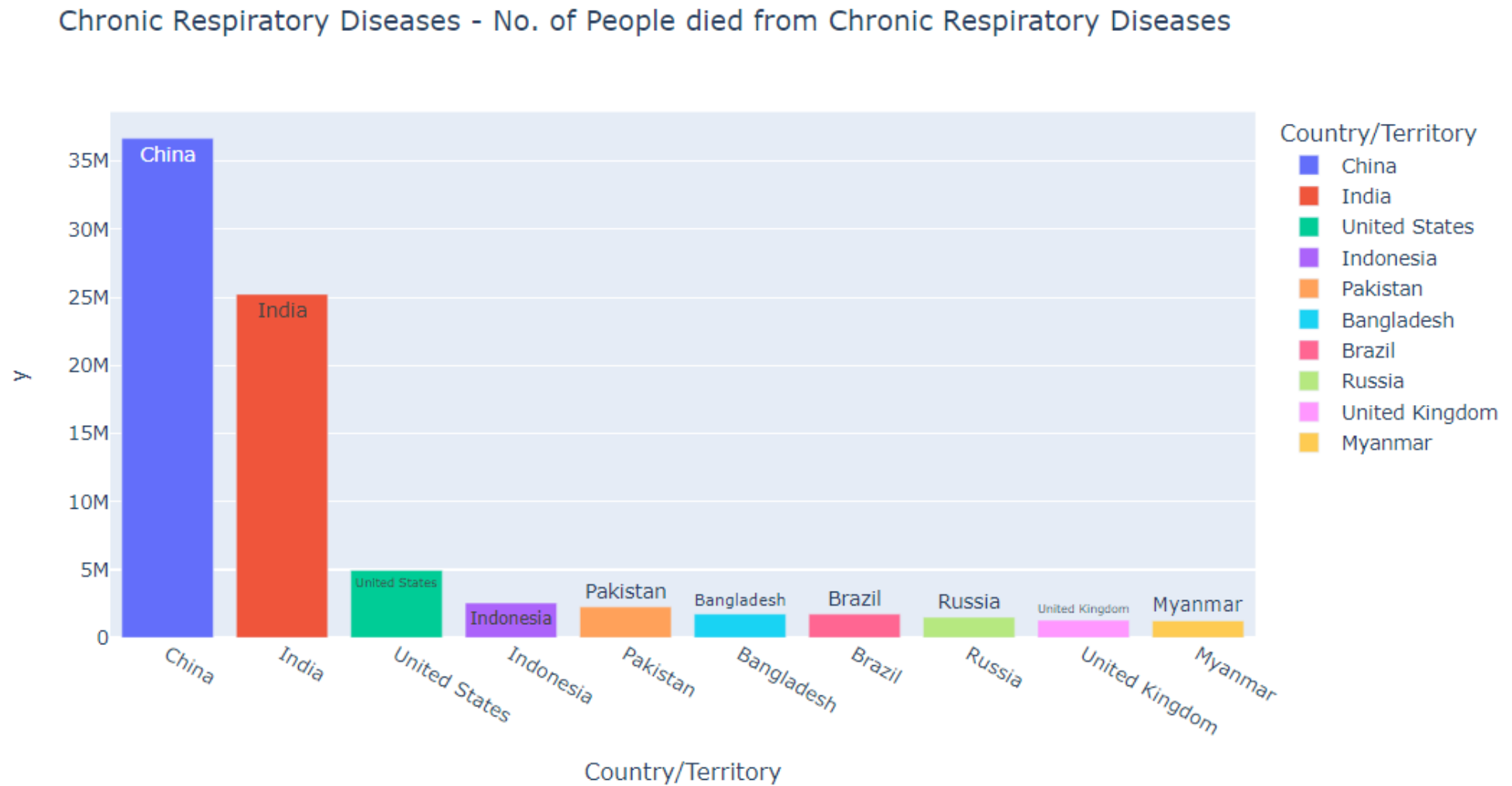
## 26. POISONINGS - NO. OF PEOPLE DIED FROM POISONING



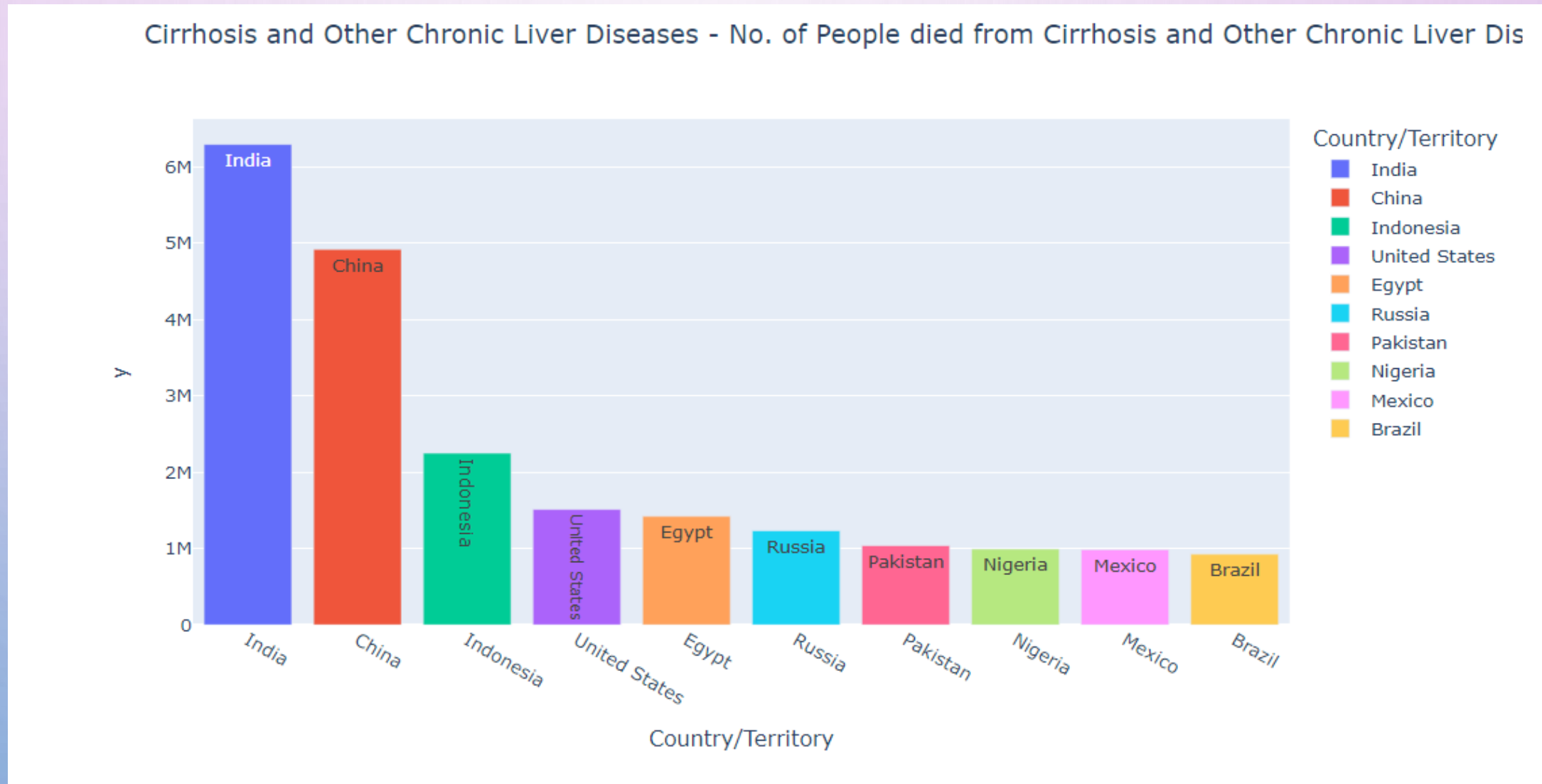
## 27. PROTEIN-ENERGY MALNUTRITION - NO. OF PEOPLE DIED FROM PROTEIN-ENERGY MALNUTRITION



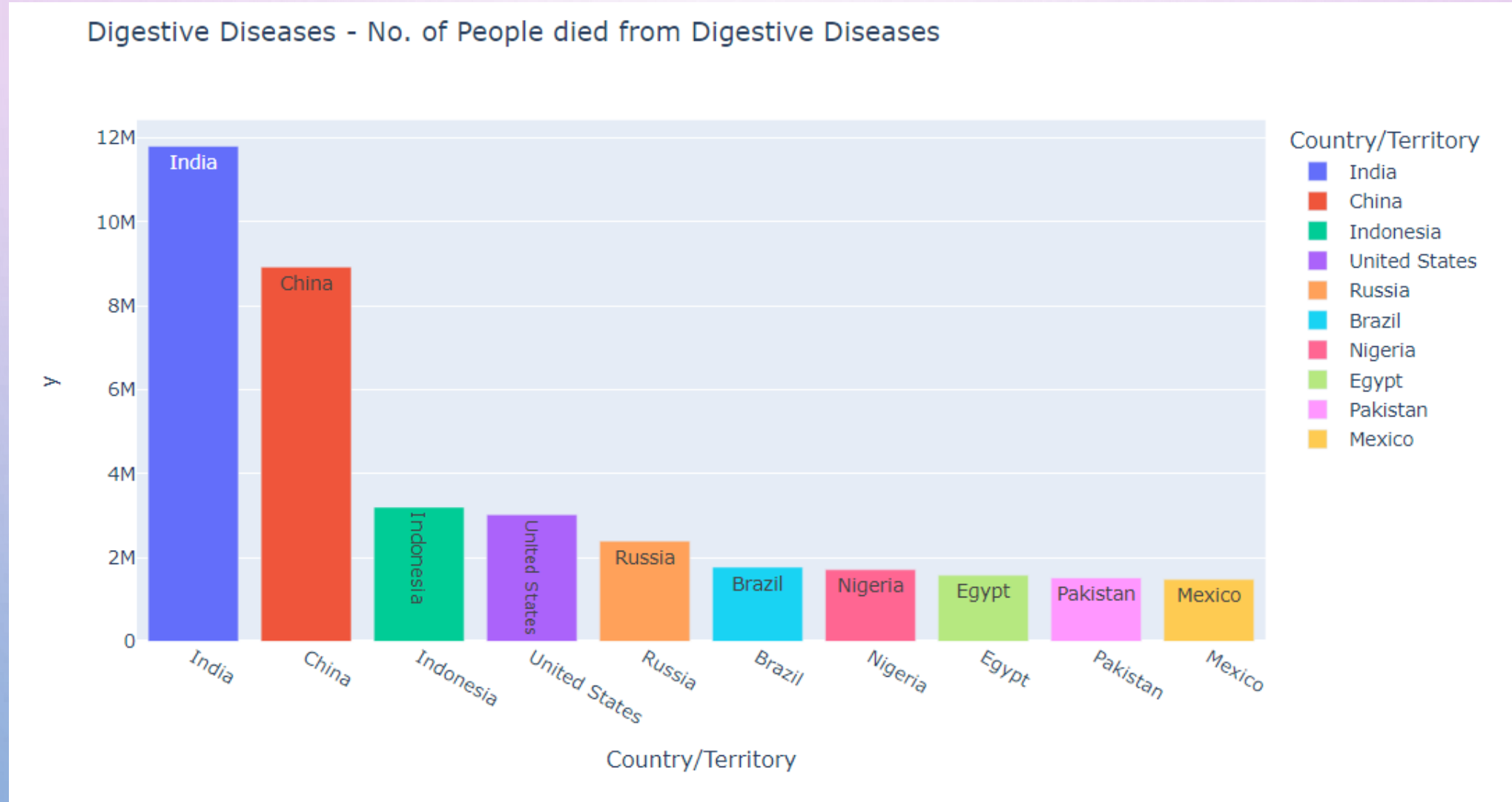
## 28. CHRONIC RESPIRATORY DISEASES - NO. OF PEOPLE DIED FROM CHRONIC RESPIRATORY DISEASES



## 29. CIRRHOSIS AND OTHER CHRONIC LIVER DISEASES - NO. OF PEOPLE DIED FROM CIRRHOSIS AND OTHER CHRONIC LIVER DISEASES

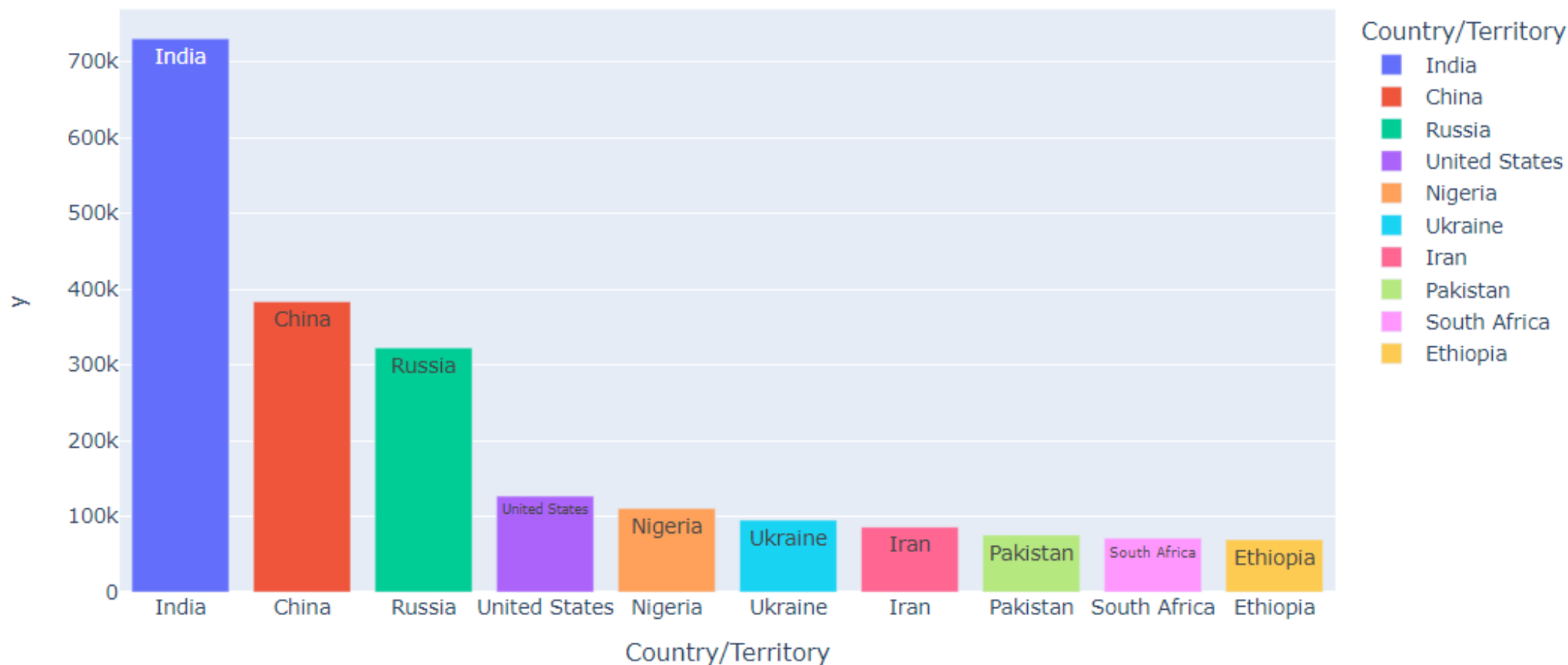


## 30. DIGESTIVE DISEASES - NO. OF PEOPLE DIED FROM DIGESTIVE DISEASES



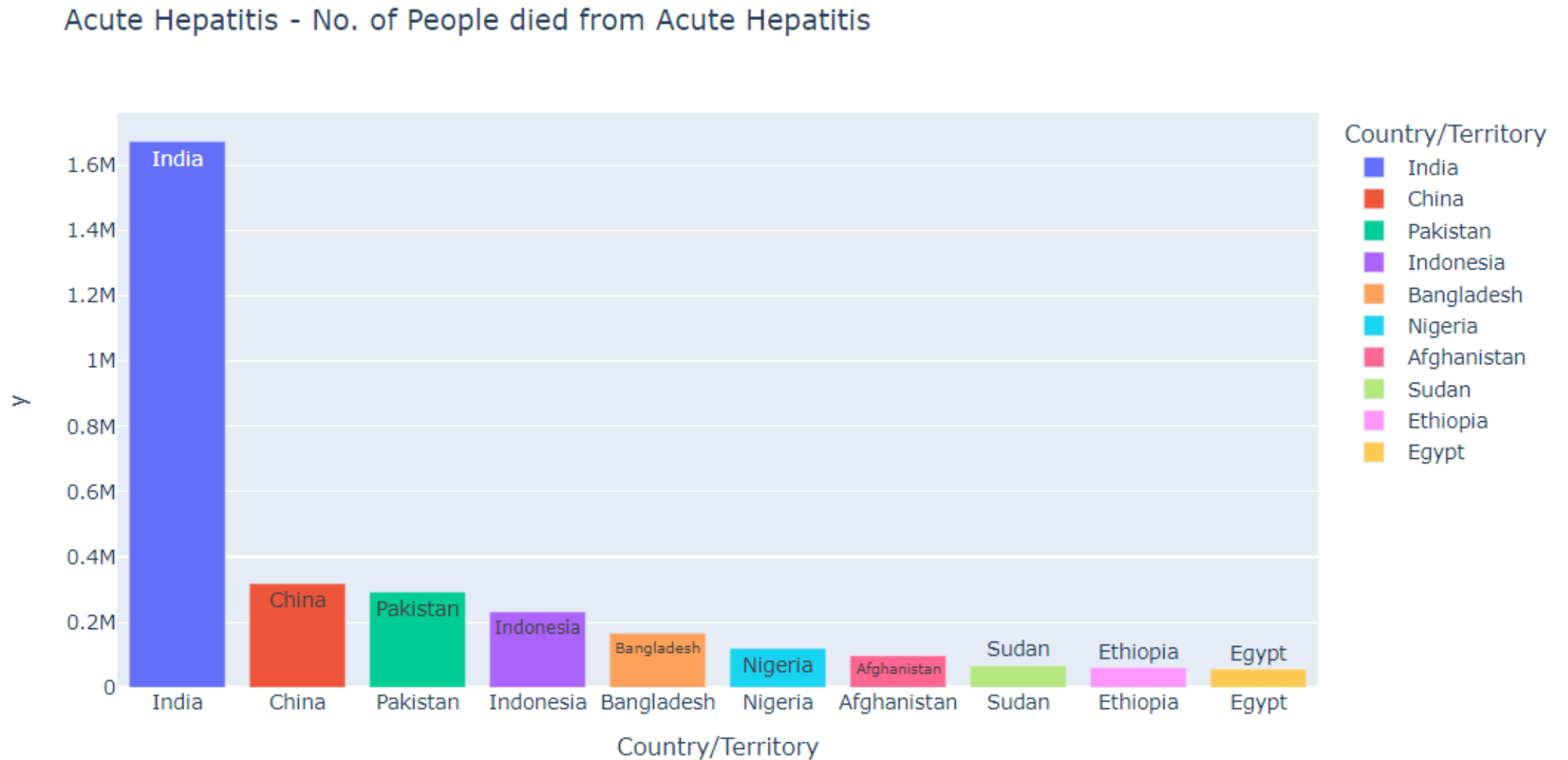
## 31. FIRE, HEAT, AND HOT SUBSTANCES - NO. OF PEOPLE DIED FROM FIRE OR HEAT OR ANY HOT SUBSTANCES

Fire, Heat, and Hot Substances - No. of People died from Fire or Heat or any Hot Substances



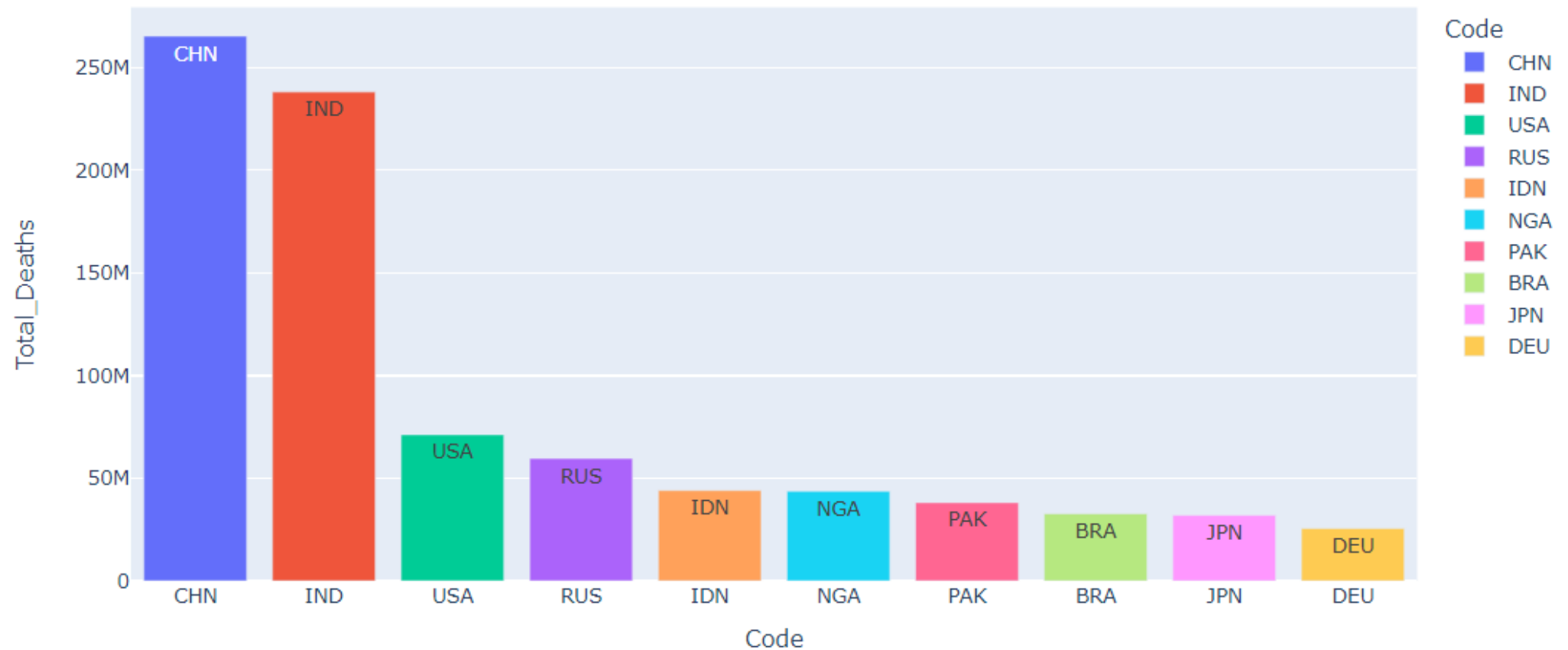


## 32. ACUTE HEPATITIS - NO. OF PEOPLE DIED FROM ACUTE HEPATITIS

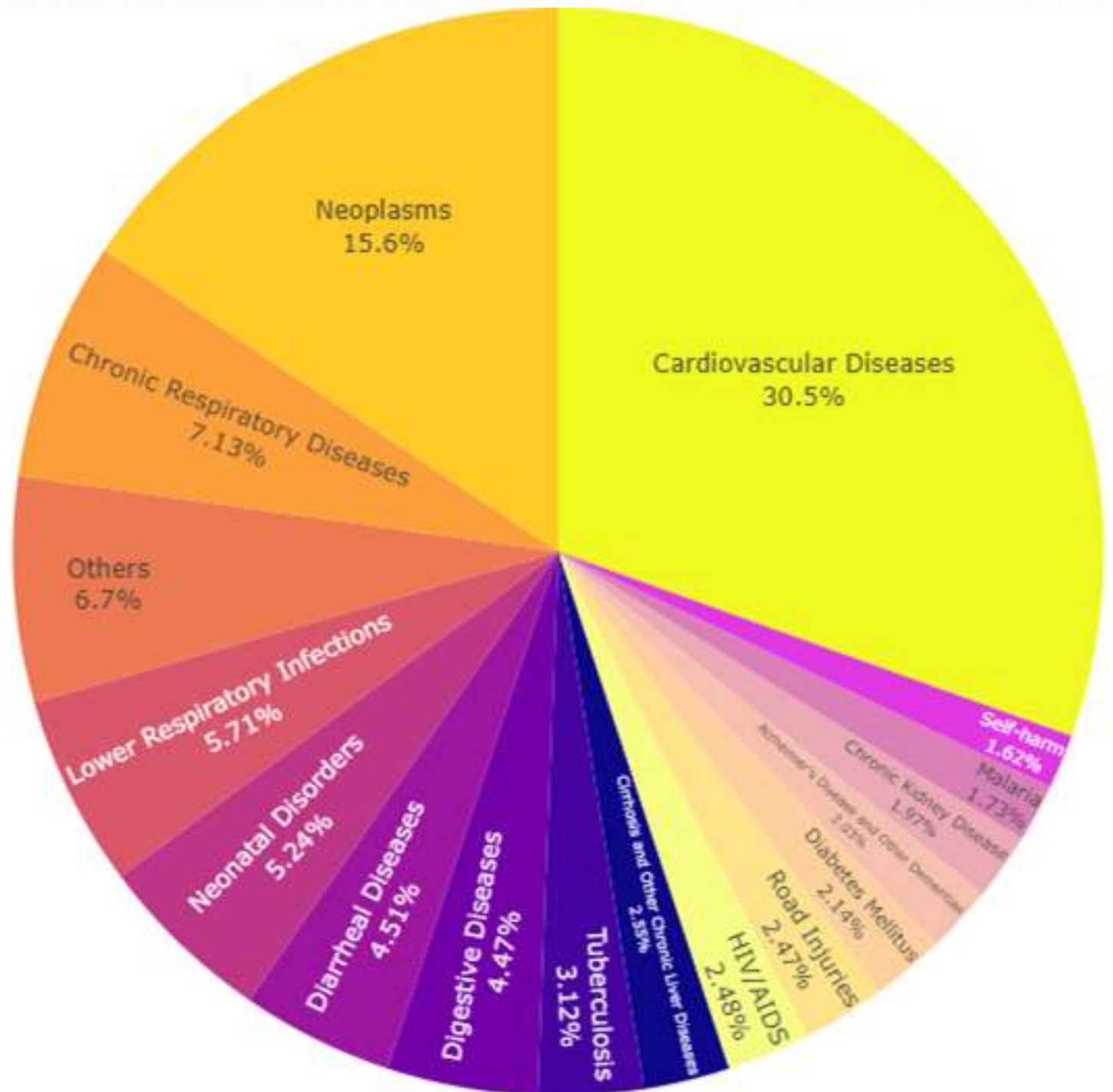


# COUNTRIES WITH THE HIGHEST DEATH RATES WORLDWIDE

Countries with the highest death rates worldwide



# BIGGEST DEADLIEST DISEASES IN THE WORLD



### **Conclusions:-**

- 1) CHINA , INDIA & USA has highest death rates due to Cardiovascular, Neoplasms ,and Respiratory are The top global causes of death.**



**Thank you**