

[Github Link](#)

Data analysis Project

Crimes against children in India 2014



Outline

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03 Data Cleaning

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Introduction

In this presentation, we delve into a detailed analysis of crime data across various states and Union Territories in India for the year 2014. The objective is to provide insights into the distribution and intensity of different types of crimes and their impact on different regions.

Crime data serves as a crucial element in understanding public safety, resource allocation, and policy-making. By examining the total number of reported crimes, the distribution of specific crime categories, and their per capita impact, we aim to highlight key trends and disparities that can inform better strategies for crime prevention and intervention.

Scope of Analysis

- Total Crime Overview: We start by analyzing the overall crime rates across states and UTs to provide a snapshot of the crime landscape.
- Crime Categories: Specific focus is given to individual crime categories such as murders, rapes, and child rapes, offering a deeper understanding of the nature and prevalence of these crimes.
- Per Capita Analysis: To provide a fair comparison across regions with different population sizes, we calculate crime rates per capita. This approach ensures that the analysis reflects the relative impact of crimes in different areas.

Key Objectives

- Identify Regional Disparities: Highlight variations in crime rates and categories between states and UTs.
- Visualize Data: Present data through various visualizations to illustrate trends and patterns clearly.
- Inform Policy: Offer insights that can guide policymakers, law enforcement agencies, and community leaders in making informed decisions.

Data Collection

The data used in this analysis is sourced from the official Indian government website, which provides comprehensive crime statistics for various states and Union Territories. The data was downloaded as a CSV file and used for detailed analysis and visualization.

Data Link – [Government of india datasets](#)

The analysis presented is based entirely on official crime statistics obtained from the Indian government's crime data portal. This dataset is a comprehensive and authoritative source of information, collected and published by government agencies to provide an accurate representation of crime across various states and Union Territories.

Data Source

Data Features

Data Collection

It is important to emphasize that this analysis is conducted with a commitment to objectivity and impartiality. The results are intended to provide an informative and data-driven understanding of crime trends and are not meant to criticize or single out specific regions or communities. Our goal is to highlight patterns and disparities in a manner that supports informed discussions and decision-making for enhancing public safety and policy formulation. This work is conducted with the highest respect for data integrity and aims to contribute constructively to the dialogue on crime prevention and management.

Data integrity and objectivity

Disclaimer

The provider of this dataset, the Government of India, makes no claims, promises, or guarantees about the accuracy, completeness, or adequacy of the data and expressly disclaims liability for errors and omissions in the contents of this dataset. No warranty of any kind, implied, expressed, or statutory, including but not limited to the warranties of non-infringement of third party rights, title, merchantability, fitness for a particular purpose, and freedom from computer virus, is given with respect to the contents of this dataset or its links to other internet resources.

Data integrity and objectivity

Data Cleaning

- As part of this project, specific types of crimes have been excluded from the analysis to focus on relevant categories. The following steps were taken to clean the data:
 - Initial Inspection: The dataset was thoroughly inspected to understand its structure and content. Exclusion of Specific Crime Types: Certain crime types, such as foeticides and infanticides, were excluded from the dataset. This decision was made to streamline the analysis and focus on other categories of crimes.
 - Deleting rows, such as those containing total data of states and union territories, is often necessary during data analysis for several reasons related to data integrity, analysis focus, and accuracy of results:
 - By carefully removing total rows or aggregate data before analysis, analysts ensure that their findings are based on accurate, unit-level information that aligns with the analytical objectives. This approach enhances the reliability and relevance of conclusions drawn from the analysis, supporting informed decision-making and meaningful interpretations of the data.



Insights from EDA

Total crimes against children in 2014

sorted the crime data per state to get a better vision

- Madhya pradesh recorded highest number of crimes and lakshadweep reported very few. Since the population is different in each state and uniuin territory, we can't make very well assumptions
- Uttar pradesh also recorded too many cases that is close behind.

	States/UTs	2014
0	Madhya Pradesh	15055
1	Uttar Pradesh	14824
2	Delhi UT	9345
3	Maharashtra	8108
4	West Bengal	4909
5	Chhattisgarh	4353
6	Rajasthan	3856
7	Karnataka	3416
8	Gujarat	3219
9	Haryana	2534
10	Kerala	2391

Sum of Crimes by Crime Head

Added all the crimes based on crime head in India.

- kidnapping and abduction cases is the most reported cases and the number of rape cases is alarming
- Kidnapping and abduction have a major share in crimes against children

[24]:	Crime Head	2014
0	6 - Kidnapping & Abduction_Total (Section 363,...	37854
1	3 - Rape	13766
2	4 - Assault on women with intent to outrage he...	11335
3	19 - Protection of Children from Sexual Offenc...	8904
4	22 - Other crimes committed against children	8484
5	10 - Procurement of minor girls (Section 366-A...	2020
6	1 - Murder (Section 302 and 303 IPC)	1817
7	18 - Juvenile Justice (Care and Protection of ...	1315
8	9 - Exposure and Abandonment (Section 317 IPC)	983

Child Murders reported

Added all the child murders happened in India sort by state

- Uttar Pradesh recorded more child murders with a great gap with the second state

[34]: States/UTs	
Uttar Pradesh	543
Maharashtra	195
Madhya Pradesh	131
Tamil Nadu	103
Karnataka	87
Gujarat	82
Rajasthan	73
Telangana	70
West Bengal	64

Child Rapes reported

Added all the child murders happened in India sort by state

- Madhya Pradesh recorded most number of child rape cases in the year 2014
- Maharashtra and Uttar Pradesh also have high number of cases reported in 2014

[35]: States/UTs

Madhya Pradesh	2352
Maharashtra	1714
Uttar Pradesh	1538
Delhi UT	1004
Rajasthan	825
Chhattisgarh	806
Kerala	754
Odisha	753
Karnataka	694

Child/Underage Marriage reported

Added all the child marriages happened in india sort by state

- Child marriage still prevails in india (2014)
- Tamil nadu recorded highest number of child marriage(47)
- 15 states are not recorded any child marriages

[36]:	States/UTs	
	Tamil Nadu	47
	Karnataka	44
	West Bengal	37
	Kerala	19
	Andhra Pradesh	16
	Gujarat	16

Child Abduction cases reported

Added all the child abductions happened in India sorted by state

- Child marriage still prevails in India (2014)
- Tamil Nadu recorded highest number of child marriage (47)
- 15 states are not recorded any child marriages

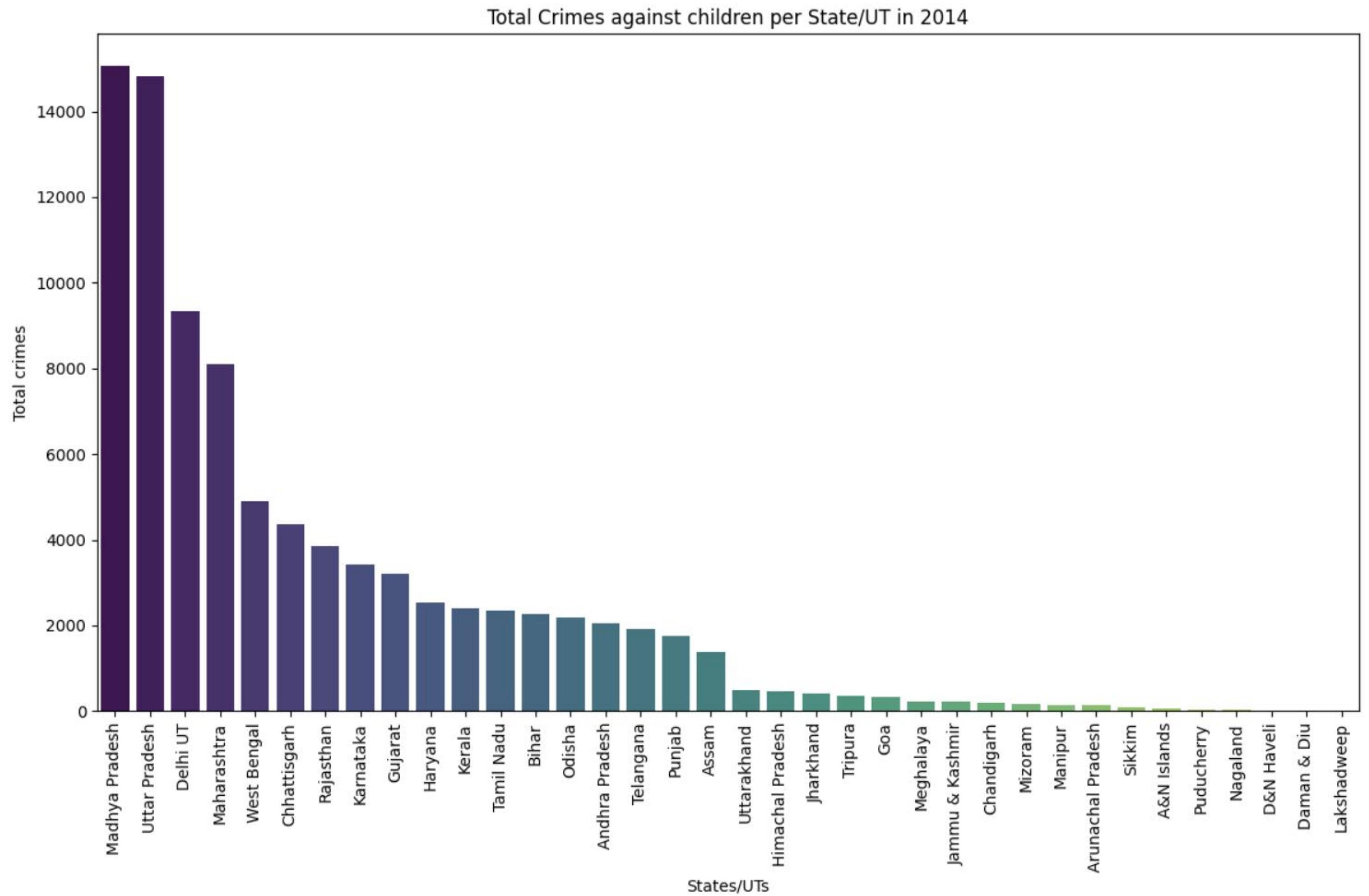
[36]:	States/UTs	
	Tamil Nadu	47
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Data visualizations



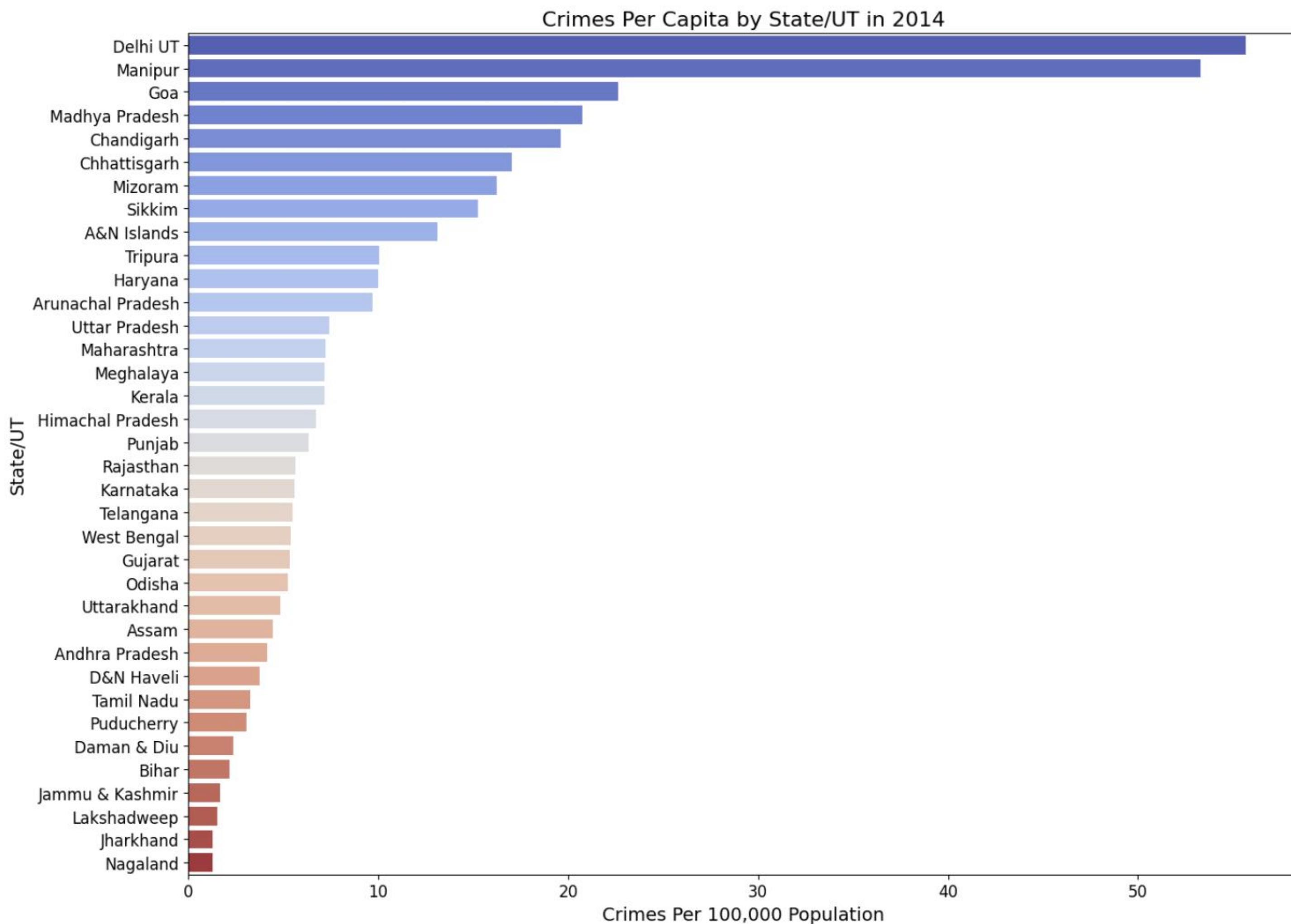
Total crimes against children in 2014

- Madhya pradesh recorded highest number of crimes in India
- Uthar pradesh also reporting high number of crimes against children and lakshadweep has least



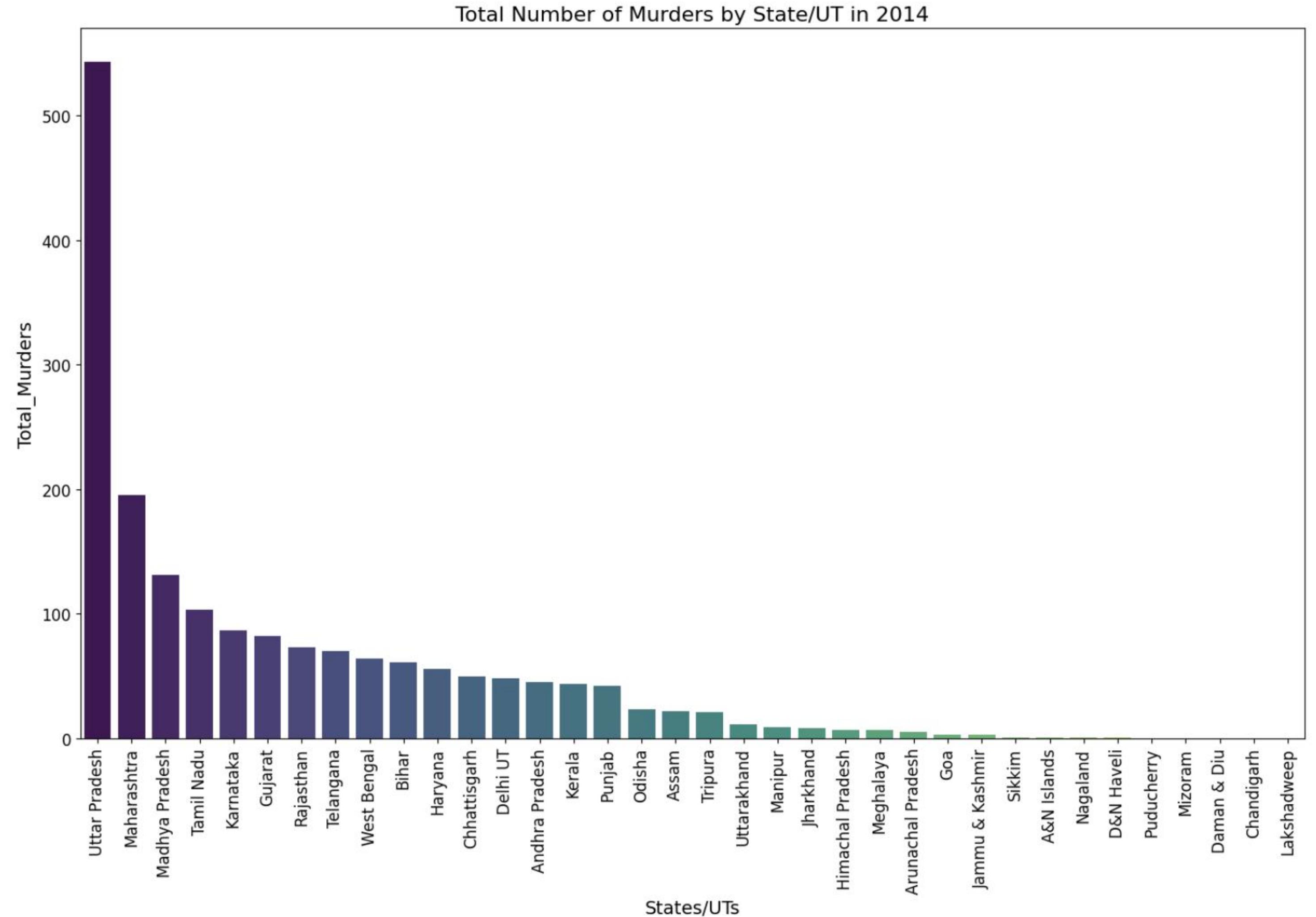
crimes against children per 100000 people

- Delhi has highest crimes per capita against children in 2014
- Nagaland has the fewest crimes per capita
- With Delhi, Manipur also showing high number of crimes reported



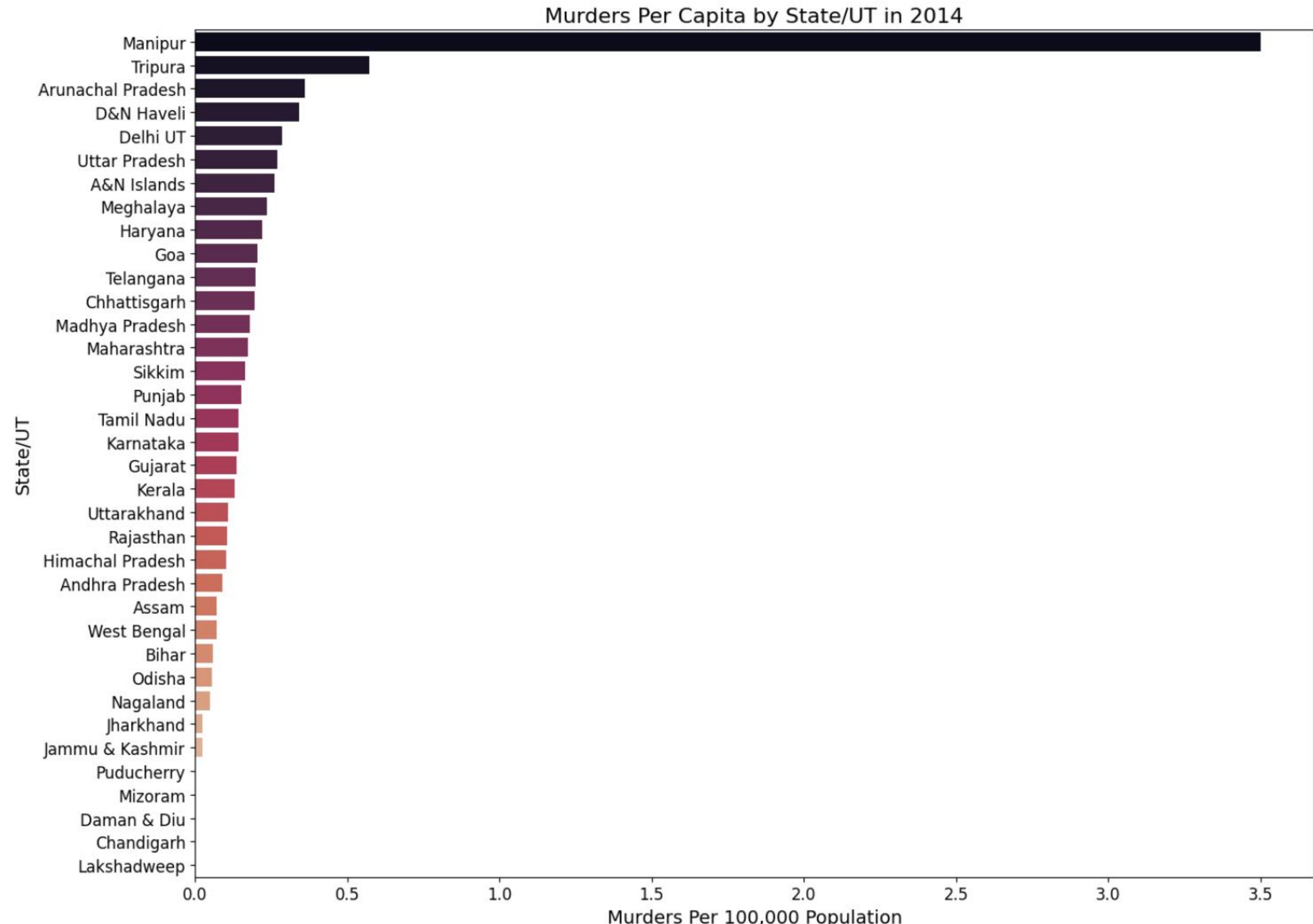
Child murders reported per state

- Uthar pradesh have a staggering number of child murder cases in 2014
- The UP crim rates is more than double from the second place, Maharashtra



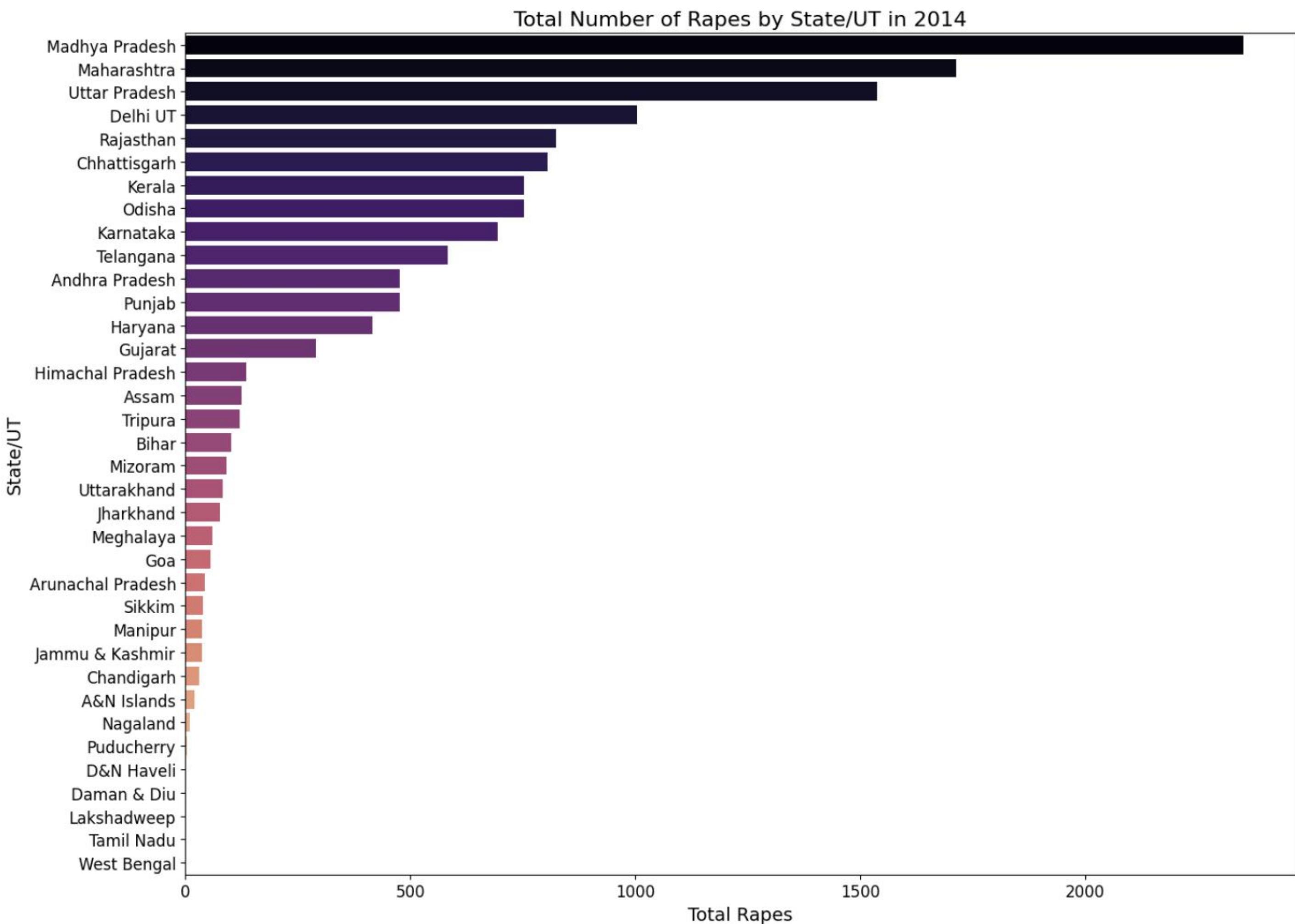
Child murders reported per 100000 people

- Mnipur have a staggering amount of child murder in 2014. But the statistics range from 0 to 3.5 per 100000. So the statistics showing is a bit exaggerated
- Puduchery, mizoram, daman & Diu, Chandigarh and lakshadweep has not reported any child murders in 2014



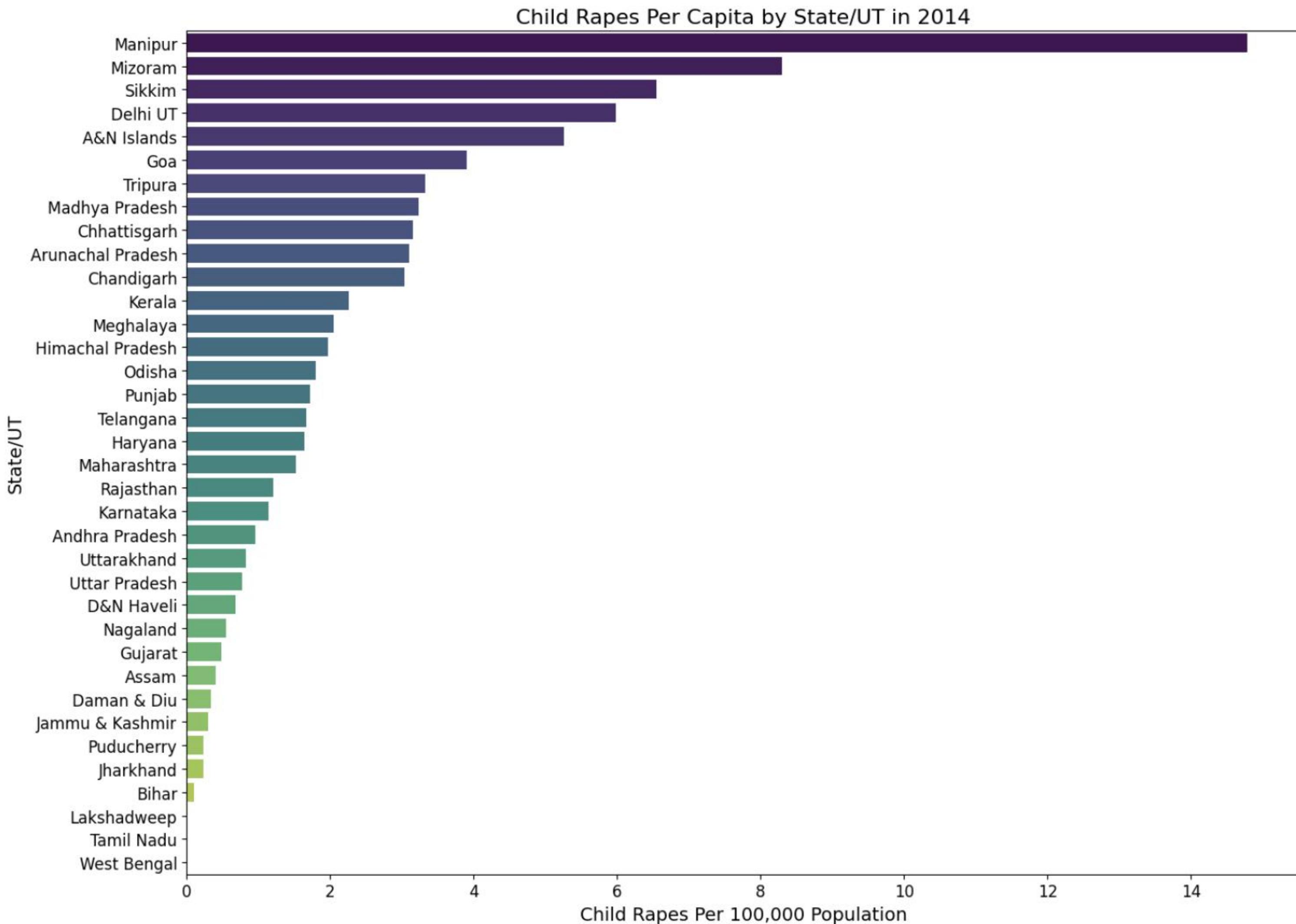
Child rapes reported per state

- Madhya pradesh, Maharashtra and Uthar pradesh have high numbers of child rapes reported in 2014



Child rapes reported per 100000 people

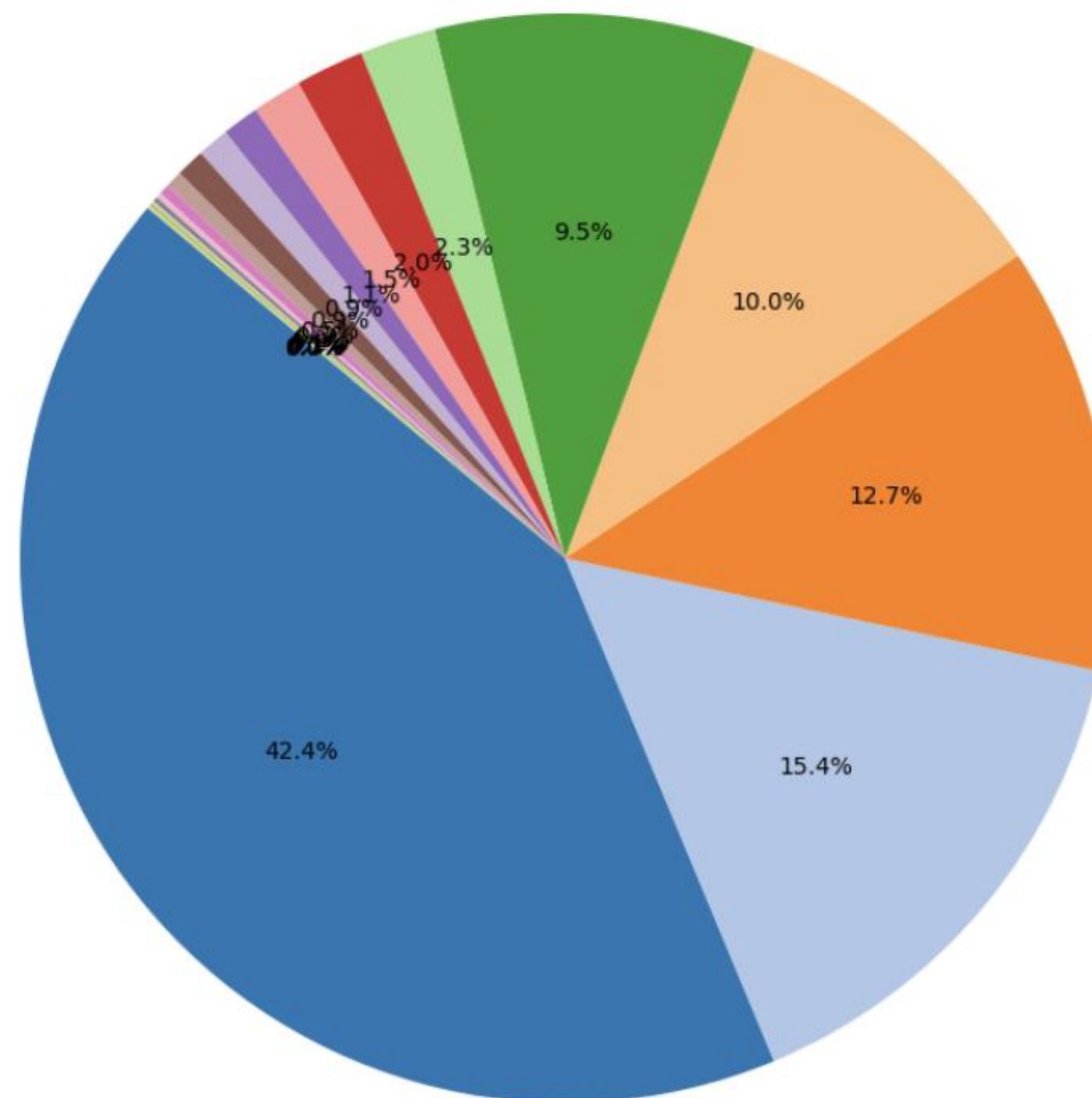
- In child rape index also manipur has most reported cases in 2014
- lakshadweep, tamil nadu and west bengal does not report child rape cases in 2014



Which crime is committed more?

- From both the charts, we understand the almost half of the crimes against children are abduction cases
- We came to the understanding that child abduction cases are a major problem in india

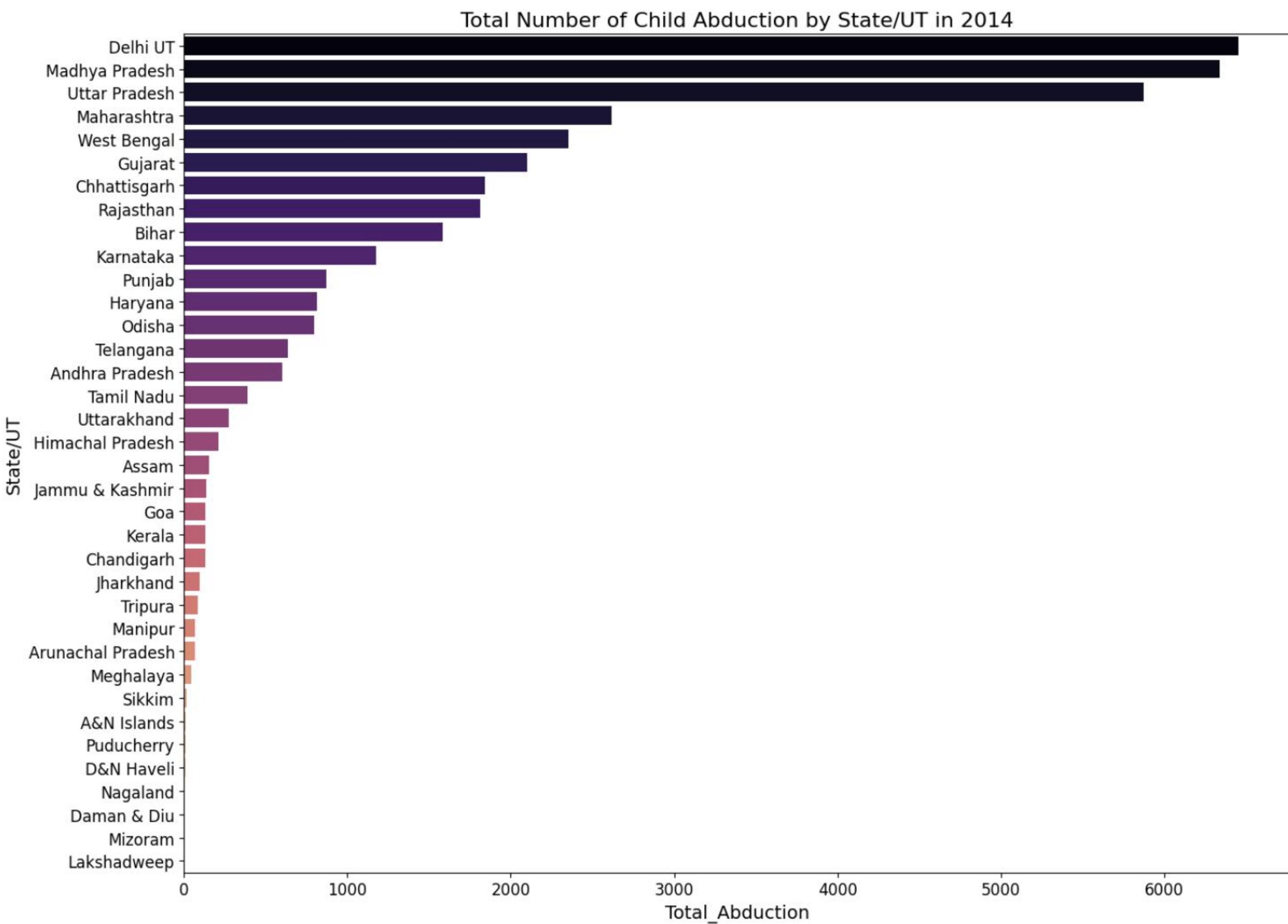
Distribution of Total Crimes by Crime Head in 2014



6 - Kidnapping & Abduction_Total (Section 363,364,364A, 366-369 IPC)
3 - Rape
4 - Assault on women with intent to outrage her Modesty (Section 354 IPC)
19 - Protection of Children from Sexual Offences Act, 2012
22 - Other crimes committed against children
10 - Procurement of minor girls (Section 366-A IPC)
1 - Murder (Section 302 and 303 IPC)
18 - Juvenile Justice (Care and Protection of Children) Act, 2000
9 - Exposure and Abandonment (Section 317 IPC)
20 - Attempt to commit Murder u/s 307 IPC
21 - Unnatural Offences u/s 377 IPC
5 - Insult to the Modesty of Women (Girls Children) (Section 509 IPC)
14 - Prohibition of Child Marriage Act, 2006
16 - Child Labour (Prohibition & Regulation) Act, 1986
2 - Infanticide (Section 315 IPC)
17 - Immoral Traffic (Prevention) Act, 1956
13 - Selling of minors for prostitution (Section 372 IPC)
8 - Abetment of Suicide of child (Section 305 IPC)
12 - Buying of minors for prostitution (Section 373 IPC)
11 - Importation of Girls from Foreign Country (Section 366-B IPC)
15 - Transplantation of Human Organs Act, 1994

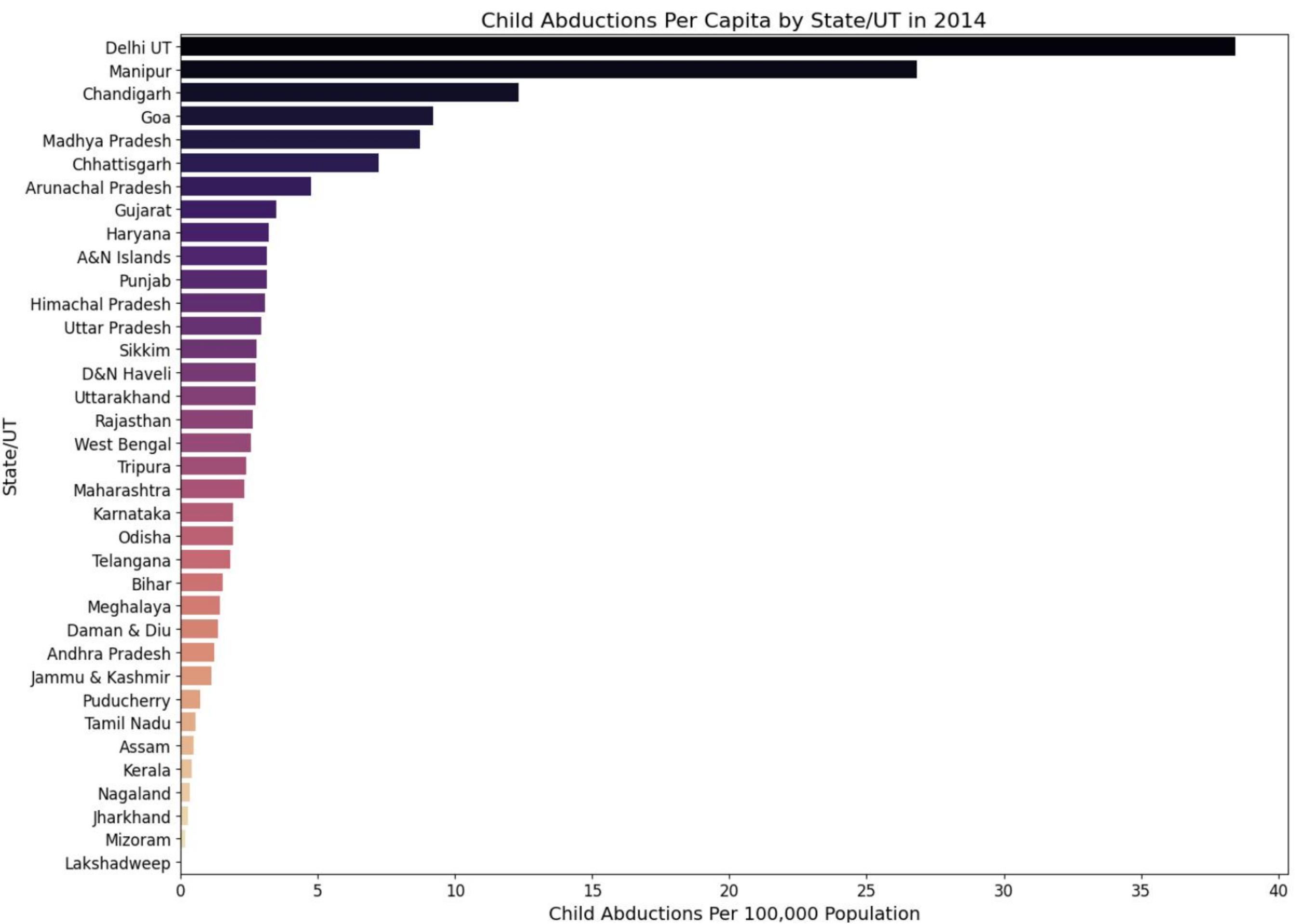
Abduction of children in 2014

- Delhi, Madhya pradesh and Uthar pradesh have very high number of child abduction cases reported in the year 2014
- We found 42 percent of crimes against children are abductions and delhi tops in most number of children abduction reporte.



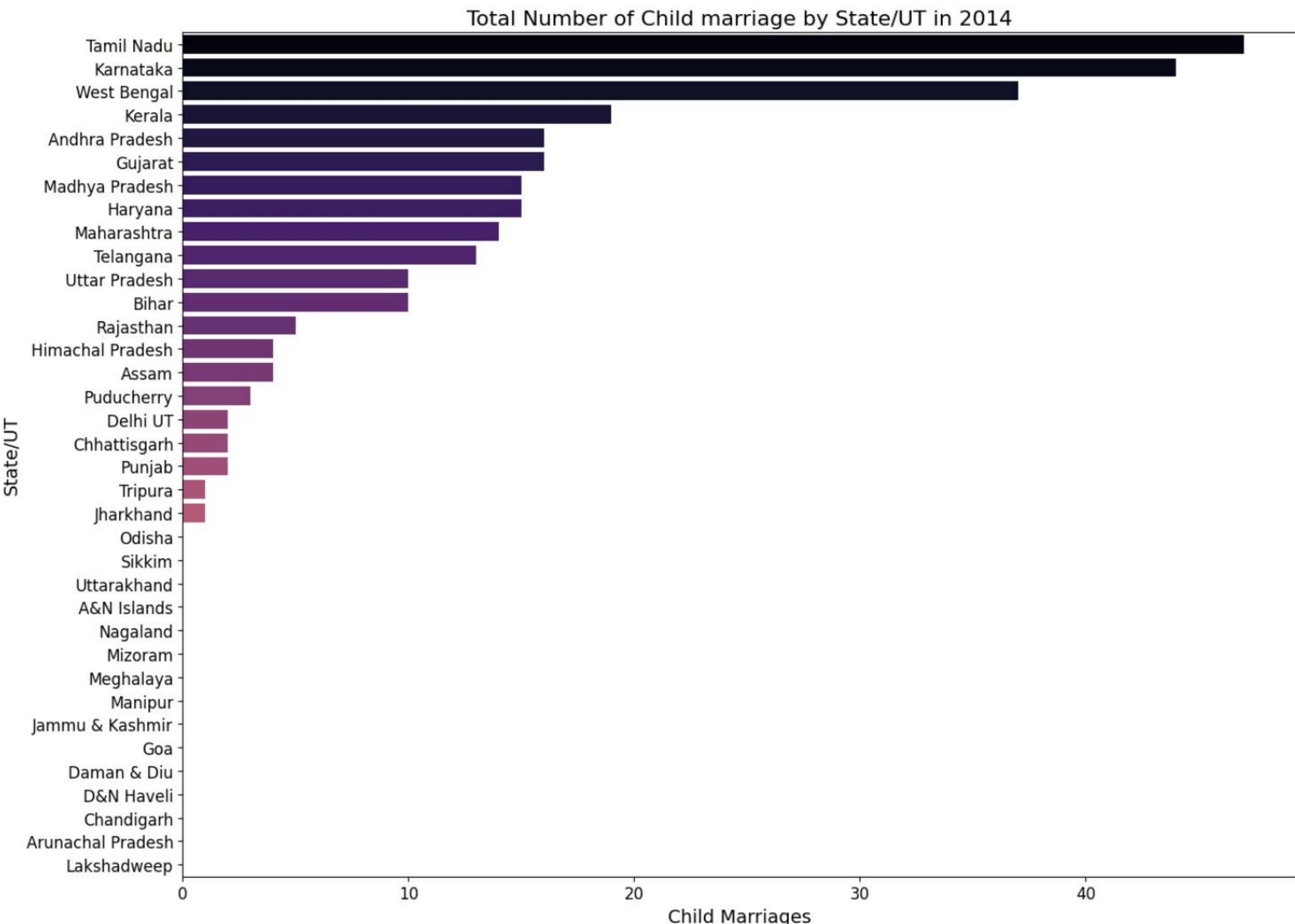
Abduction of children per 100000 people

- Child abduction is nearly 40 percent of the crimes in india and delhi and manipur reported highest number of cases per 100000 people
- Nagaland has the fewest crimes per capita



Child/underage marriages in India, 2014

- child/ underage marrying is higher in Tamil Nadu
- There is a pattern of south indian states because there are 4 south indian states in top 5
- Tamil nadu recorded most number of underage marriage in 2014
- 15 territories report no child marriage in 2014



Findings From Analysis



Conclusion



Overall Crime Statistics:

- Madhya Pradesh and Uttar Pradesh recorded the highest number of total crimes in India, indicating a notable level of criminal activity in the state. This high crime rate highlights the need for targeted interventions and enhanced law enforcement measures.



Crimes Against Children for 100000 people

- Delhi stands out with the highest number of crimes per 100,000 people against children in 2014. This indicates a significant level of criminal activity impacting children in the capital territory, suggesting an urgent need for enhanced child protection measures and targeted law enforcement strategies.
- Nagaland has the lowest crime rate per 100,000 people against children, reflecting a relatively lower incidence of reported crimes in the state compared to others.

Conclusion



Child Abduction Prevalence:

- From the charts and data analyzed, it is evident that nearly half of the crimes against children in India are related to abductions. This significant proportion underscores child abduction as a major issue requiring urgent attention. The prevalence of abduction cases reflects a serious concern for child safety and indicates the need for enhanced preventive measures and law enforcement strategies to address this specific type of crime.



Understanding and Implications:

- The data reveals that child abductions are not only a prominent issue but also a critical area requiring focused efforts. The high incidence of these crimes underscores the importance of developing and implementing effective strategies to prevent abductions, support affected families, and enhance overall child protection frameworks.

Conclusion



Child Murder Statistics:

- Uttar Pradesh recorded a staggering number of child murder cases in 2014. The state's reported figures are more than double those of the second-highest state, Maharashtra, indicating a particularly severe issue with child murders.
- Manipur exhibits an alarming rate of child murders when adjusted for population size, showing a high number of cases per 100,000 people. This highlights the intensity of the problem in the state despite its relatively lower total number of cases compared to Uttar Pradesh.
- The statistics for child murders range from 0 to 3.5 per 100,000 population. This wide range suggests that the data may sometimes present an exaggerated perception of the issue in states with low numbers of reported cases. For instance, states such as Puducherry, Mizoram, Daman & Diu, Chandigarh, and Lakshadweep reported no child murders in 2014, contributing to the broader variability in the crime rates.

Conclusion



High Numbers of Child Rapes:

- Madhya Pradesh, Maharashtra, and Uttar Pradesh reported high numbers of child rape cases in 2014. These states stand out due to their significant incidence of such crimes, indicating a severe issue that requires focused attention and intervention.
- When adjusted for population size, Manipur shows the highest rate of reported child rapes per 100,000 people in 2014. This high per capita rate highlights the intensity of the problem in Manipur, despite potentially lower total numbers compared to larger states.
- The elevated per capita rate of child rapes in Manipur suggests a severe local issue that requires urgent action, including support services for victims and preventive measures.

Conclusion



High Incidence of Child Abductions:

- Delhi, Madhya Pradesh, and Uttar Pradesh reported very high numbers of child abduction cases in 2014. These states have emerged as major areas of concern, reflecting a severe issue with child abductions that necessitates targeted interventions and enhanced protective measures.
- When adjusted for population size, Delhi and Manipur stand out with the highest per capita rates of child abduction cases. Delhi, in particular, shows an exceptionally high rate of abductions per 100,000 people, indicating a significant level of criminal activity affecting children in the capital territory. Manipur also reports a high per capita rate, underscoring the severity of the issue in the state despite its lower total number of cases compared to larger states.

Thanks

Thank you everyone who been with me with this journey.
Check the [github repository](#) for more info about the project