

Analysis of Violence Against Women from 2014 to 2020 in India

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Abstract

Today, it is widely acknowledged that violence against women is a serious issue for global human rights and public health. It is a significant risk for women's poor health and has far-reaching effects on both their physical as well as mental well-being. In this analysis we have analysed data on violence against women from 2014 to 2020 for each state of India. Further we have analysed the violence in two separate categories: below 18 and 18 and above. As a special case, we have done a study of rape crime against women. In our study we found that Madhya Pradesh and Uttar Pradesh have been the states with most crime against women while the states like Nagaland, Sikkim, Manipur, Mizoram have reported least crime against women.

1. Introduction

Violence is as old as human civilization or even beyond that. Sometimes we call it the fittest will survive, other times we call it crime. As humans have evolved over centuries, their perspective towards their actions have changed. To be just is among one of the foundational pillars for a civilization and one of the strongest indication of a prosperous civilization. Among humans, women have always been looked as a weaker counterpart and so, throughout history, have been at the receiving end of violence directly or indirectly. How a civilization treats their women is another fundamental indication of a prosperous civilization.

Violence is a general term in itself. To violate somebody doesn't always means a physical form of assault. It can take physical, verbal as well as non-verbal forms. Depending upon the form, humans have classified them into different kind of crimes. [1] *Article 1 of The United Nations Declaration of Violence Against Women 1993, defines violence against women as "any act of gender-based violence that results in, or is likely to result in, physical, sexual, or mental harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private life."* Even our laws cover them under different sections and have different punishments also. [2] Former Chief Justice of Delhi High Court Justice G. Rohini has said that physical and sexual violence, which manifests the systematic violation of the right of women to live a life of human dignity, can be stated as the major challenge to women development and empowerment. In this work of ours, we have studied the crimes that happen with women in India. More specifically, we have analysed the crimes against women in the 28 states of India from 2014 to 2020. Further, narrowing down to one crime, we have taken rape crime against women as a special case for this study. Rape of adult woman in itself is a heinous crime, however, unfortunately, these days news are full of reports about rape of girl child. Some of them being against girls as young as a few months. To study the state of affairs of rape crime against adult women and girl child, we have further divided our studies on rape crimes against women and girl child.

The next section in this study covers the details of the datasets that we have used and the methodology that we have followed for our analysis. Section 3 covers the results obtained from our analysis. Then we conclude our paper with section 4.

2. Data and Methodology

In our attempt to find answers to the various research questions that we are pursuing in this study, distinct methodologies have been applied on various data sets taken from different sources.

We have used two datasets provided by National Crime Records Bureau [3]. The first dataset that we have used consists data about total crime against women. The second dataset contains state-wise crime data against women divided in two age groups of below 18 and 18 and above. Both the datasets cover data from 2014 to 2020. To study the crime rate, by taking population into account, we have used another data about projection of population provided by Census of India, Government of India [4]. This dataset consists of projected population from year 2011 to 2036. We have used the projected population for 2014 to 2020 only.

In this paper, we have made a comparison of total crimes committed against women state-wise. Further, we have compared the growth of crimes in each of these states during these 6 years. The numbers recorded in the dataset do not take into account the size of the state and the size of the population and so can give us a biased estimate. A state with large size might have higher population than a state with smaller area. And thus, the rate of crime that happens in a state is affected by its size and area. In this study we have taken both the state and the population into account while comparing the crimes. Further, we have compared the crime rates for women below 18 and 18 and above. To see the variation in crime across states and across the seven years, we have taken the mean and standard deviation of the crime for each year. This way we have compared how the crimes vary across the states. We have plotted graphs to depict these results. Last, but not the least, we have made a note of the states where the crimes have been high and also the states where the crimes have been lowest.

3. Analysis and Discussion

3.1. State-wise Comparison of Crimes Against Women

To begin with, firstly we have compared the cases in all the states for all the five years. Figure 1 shows this comparison with bar plot. We can see in this graph that Uttar Pradesh has most cases for almost all the 7 years under consideration for this paper while north eastern states have least cases except Assam and Arunachal Pradesh.

One of the issues that we noted with studying the numbers of these crimes was that, these numbers tell us the count of the total crimes committed against women, but they don't tell us anything about why these numbers could be greater for states like Uttar Pradesh and Madhya Pradesh but lower for states like Mizoram, Nagaland or Goa. So, in our attempt to compare the states in a more neutral way, we have compared the crimes committed in states with respect to the population of that state and the area of that state.

Figure 2 shows the crimes committed against women in each of these 29 states with respect to the estimated population of that state in that year. When we see this graph we observe that Uttar Pradesh, which was at top for almost every year is no longer even in top three states with most crimes against women for any of the seven years in this study. We find that when the count of crime against women is normalised with the population of the state, Assam has the highest crime rate, followed by Odisha, Himachal Pradesh and Rajasthan while Nagaland, Tamil Nadu, Manipur and Gujarat have the least crime rate.

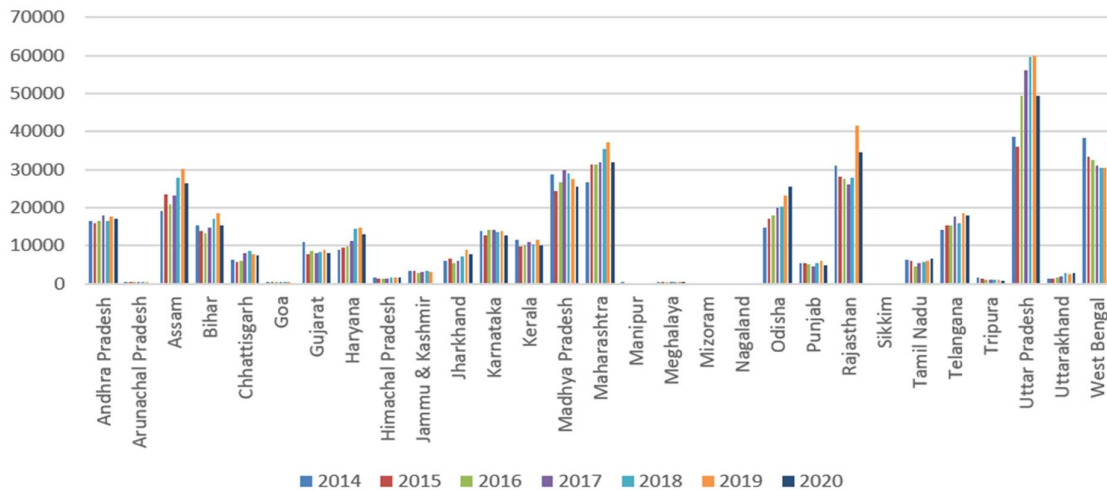


Fig. 1. Comparison of crime against women for 29 states of India from 2014-2020

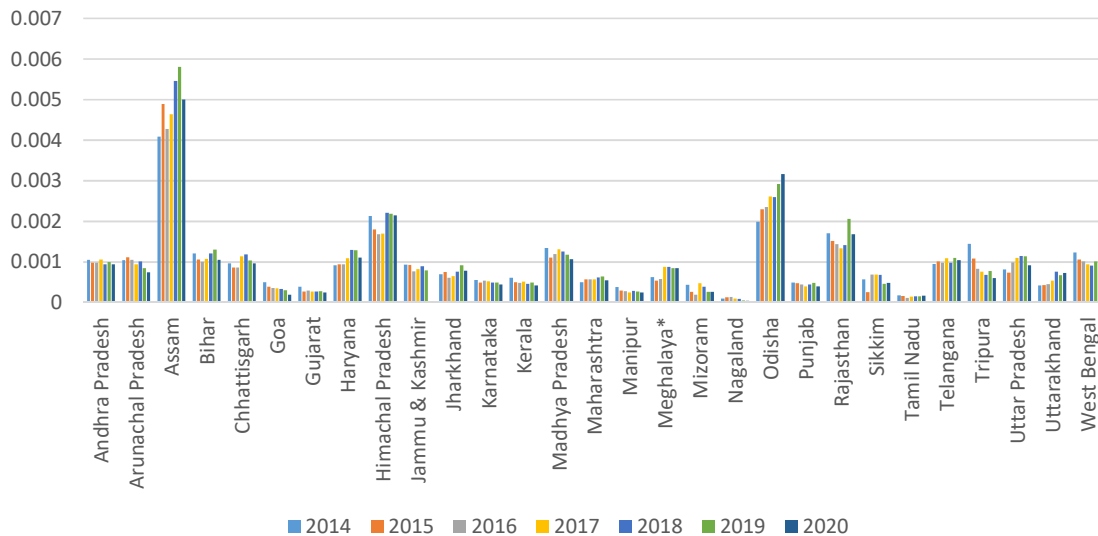


Fig. 2. Comparison of Crime against women with respect to the size of Population for 29 states from 2014-2020

In the same manner, when we took the area of the state into account we found that the area normalised graph obtained in figure 3 provides with a different perspective. We find that West Bengal, Assam, Haryana and Kerala have the most crime rate while the states of Nagaland, Arunachal, Mizoram and Manipur have the least crime rate. These graphs give us a clear perspective about these states with respect to the size of population and the size of states.

3.2. State-wise Comparison of Rape Crimes Against Women

In this analysis we focused on studying one particular type of crime against women. Rape in itself is a heinous crime and affects the physical and mental well-being of a woman for her entire life. With so many news of rape cases against women of different age groups coming every day, we decided to analyse the trend of rape cases in the 29 states of India.

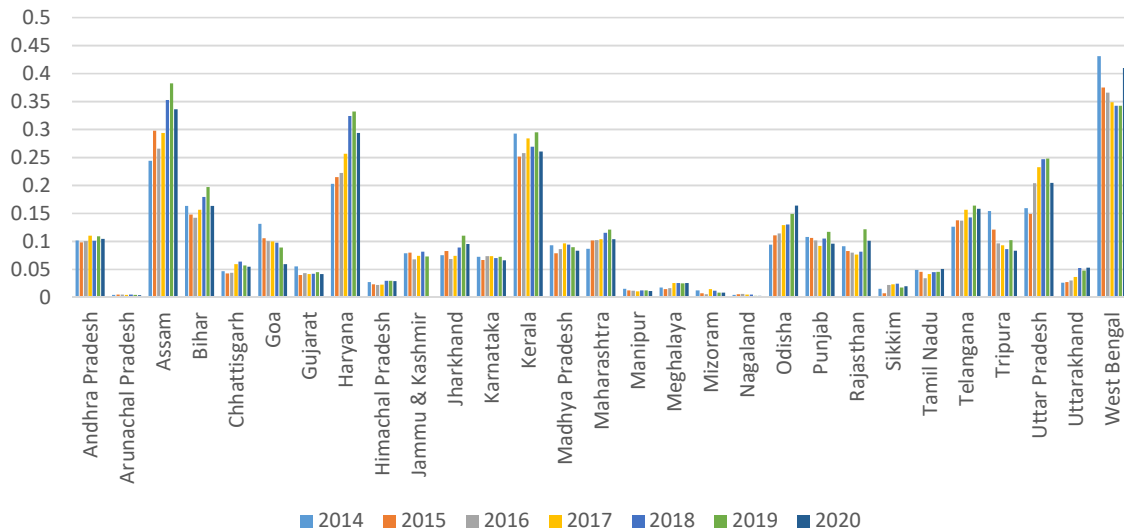


Fig. 3. Comparison of Crime against women with respect to the size of Area for 29 states from 2014-2020

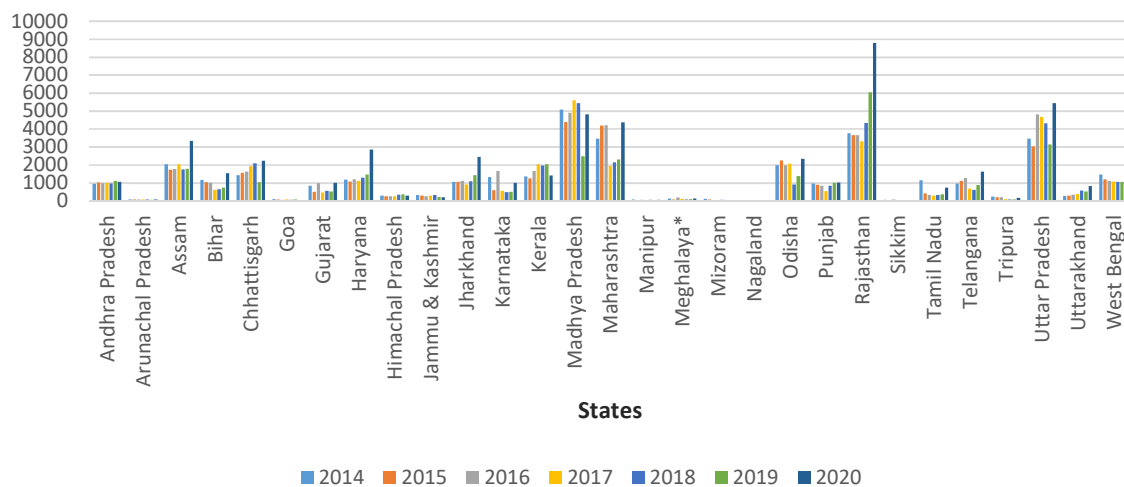


Fig. 4. Comparison of total rape crime against women for 29 states from 2014 to 2020

Figure 4 shows the count of total rape cases across all 29 states of India from 2014 to 2020. Madhya Pradesh has registered most number of rape cases in 2014, 2015, 2016, 2017 and 2018 while Rajasthan has registered the most number of reported rape crimes in 2019 and 2020. Complete opposite to this, Nagaland and Sikkim have the least number of cases from 2014-2020.

Figure 5 shows the crimes committed against women in each of these 29 states with respect to the population. Again, as we had with seen with the total cases, normalising with population has changed the perspective. Assam has the highest rate of rape crime against women followed by Odisha while Nagaland and Tamil Nadu have the least rape crime rate against women from 2014-2020.

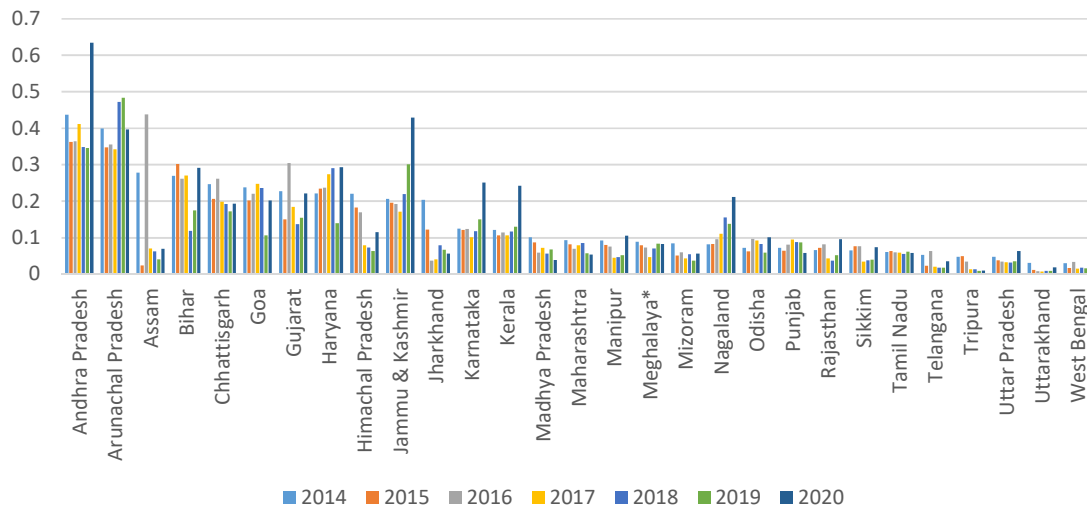


Fig. 5. Comparison of total rape crime against women with respect to population for 29 states from 2014 to 2020

Normalizing with respect to the area, with find that West Bengal has the highest rape crime to population rate in year 2014 and 2016, while Assam had the highest rate from 2015 to 2019. Arunachal and Nagaland have the least rape crime to area ratio. Figure 6 shows these details.

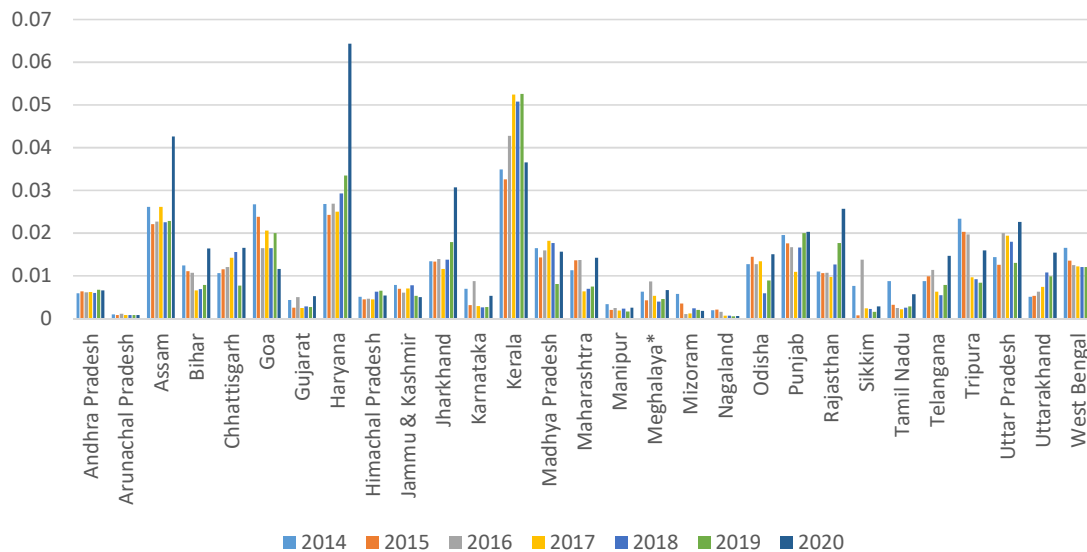


Fig. 6. Comparison of total rape crime against women with respect to population for 29 states from 2014 to 2020

To understand the spread of rape crime against girl child and women, we have further studied the rape cases in two separate age groups- below 18 and 18 and above. Figure 7 shows the statistics for each state from 2014 to 2020. Next sub-sections cover our findings in these two age groups.

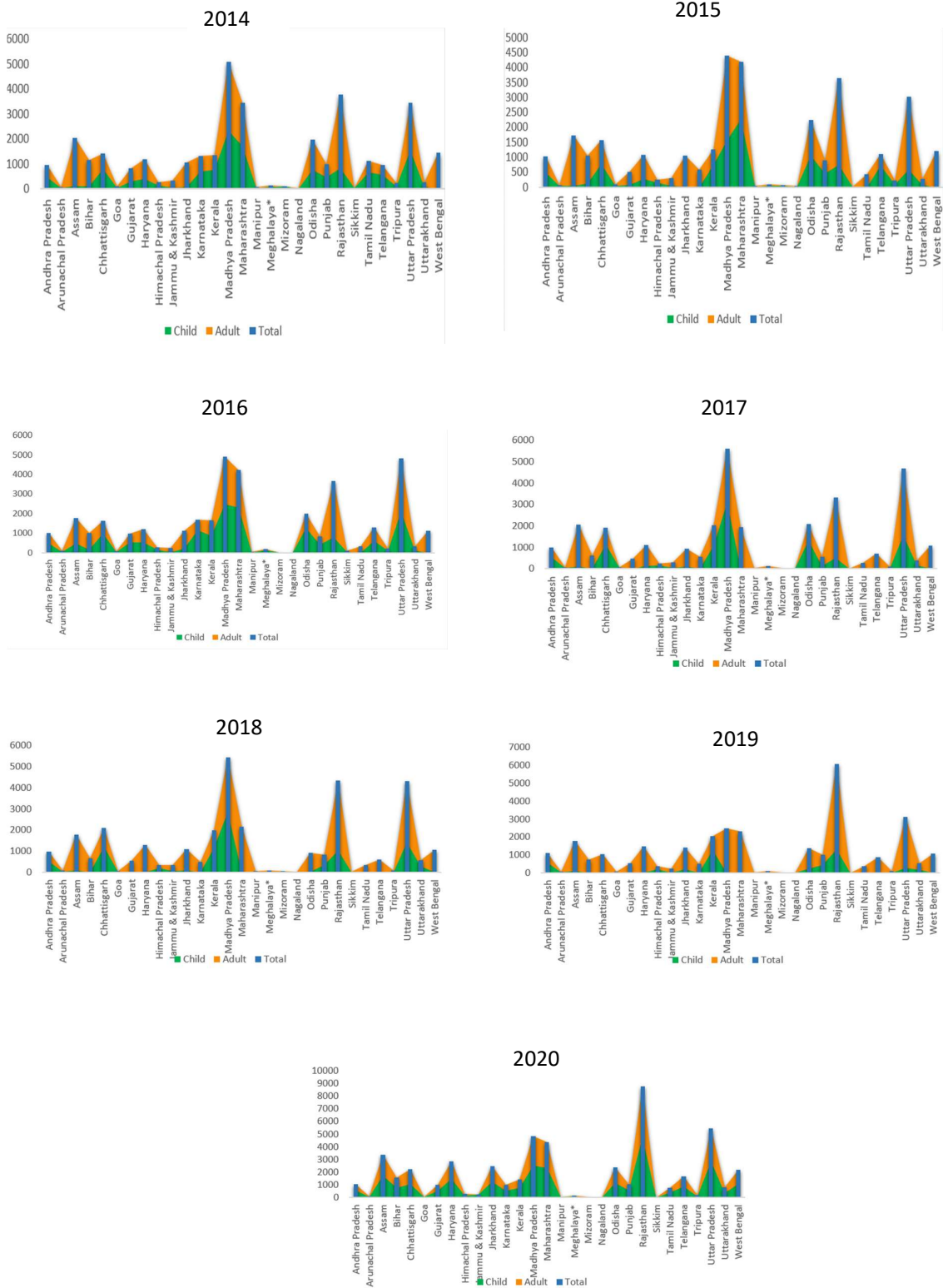


Fig. 7. Comparison of Total Rape case with cases registered below the age of 18 (Child) and 18 and above (Adult)

3.3.1 State-wise Comparison of Rape Crime Against Women Aged below 18

We have shown the standing of each state for rape crime against women in figure 8. We find that Madhya Pradesh has highest number of rape cases against girls aged below 18 year in 2014, 2015, 2016, 2017 and 2018 while Rajasthan tops in this shameful list in 2019 and 2020. Sikkim in 2014 and 2015, Manipur in 2016, Nagaland in 2017, 2018 and 2019 and Himachal Pradesh in 2020 have registered the least rape crime registered against girls below 18.

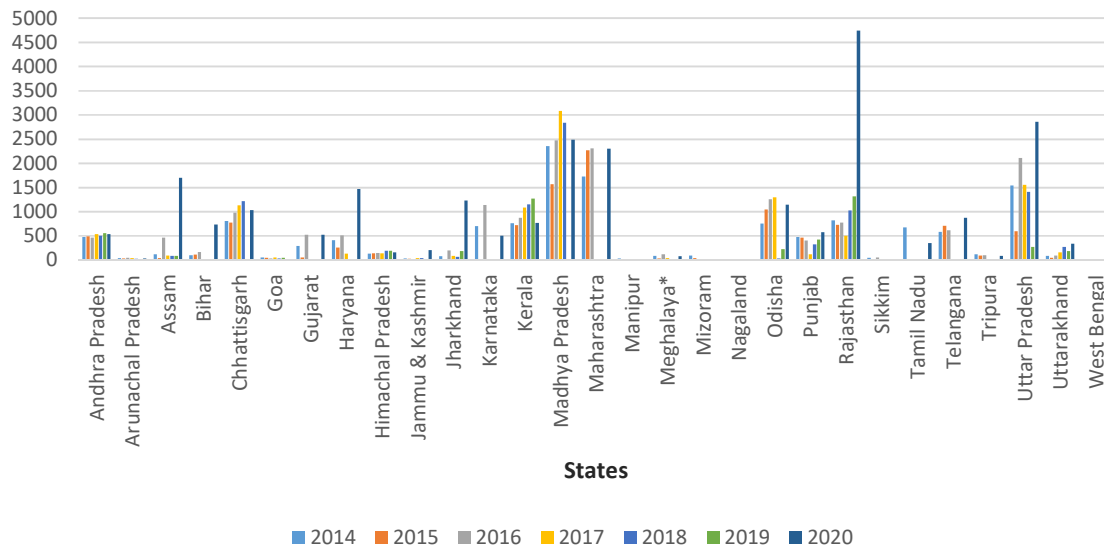


Fig. 8. Comparison of Total Rape Crime against women aged below 18 (Child) for all 29 states from 2014 to 2020

Studying the population normalised ratio we find that Kerala has the most rape cases registered against women aged below 18 for the year 2014, 2015, 2016, 2017, 2018 and 2019 while Haryana has the most cases in 2020. West Bengal has the least cases registered against women aged below 18 from 2014 to 2019, while Nagaland has the least ratio in 2020. Figure 9 shows the graph of this comparison.

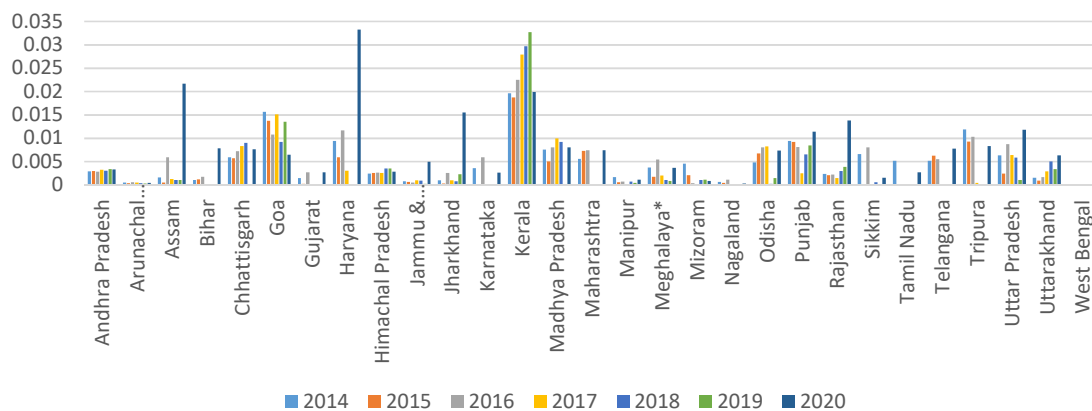


Fig. 9. Comparison of Total Rape Crime against women aged below 18 (Child) with respect to population for all 29 states from 2014 to 2020

Studying the area normalised ratio we find that Kerala again has the most rape cases registered against women aged below 18 for the year 2014, 2015, 2016, 2017, 2018 and 2019 while Haryana has the most cases in 2020. West Bengal has the least cases registered against women aged below 18 from 2014 to 201, while Arunachal Pradesh has the least ratio in 2020. Figure 10 shows the graph of this comparison.

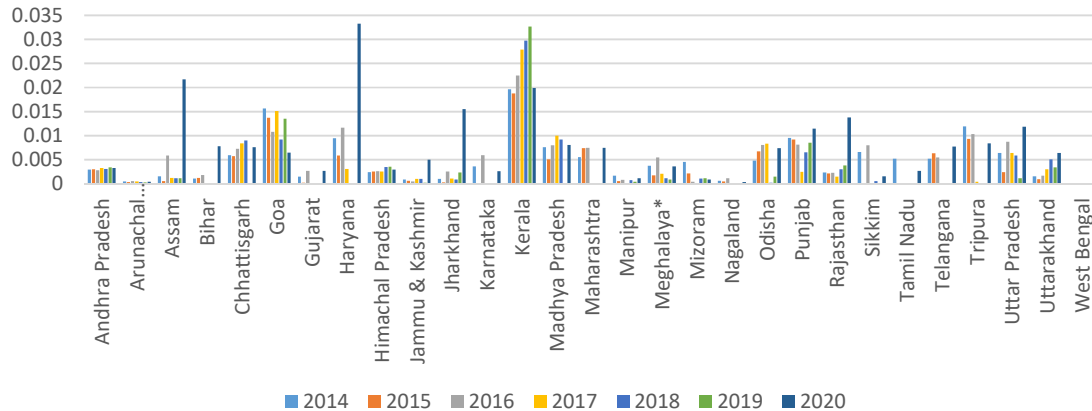


Fig. 10. Comparison of total rape crime against women aged below 18 (Child) with respect to area for each of the 29 states from 2014 to 2020

3.3.2 State-wise Comparison of Rape Crime Against Women Aged 18 and Above

In the 18 and above 18 age group, we find that Rajasthan registers the most rape cases against women aged 18 and above in 2014, 2015, 2016, 2018, 2019 and 2020 while Uttar Pradesh tops in this list in 2017. Totally opposite to this, Sikkim in 2014 and 2015, Nagaland in 2016, 2017, 2018 and 2019 and Jammu and Kashmir in 2020 have registered the least rape crime cases against women aged 18 and above. Graph in figure 11 shows these statistics.

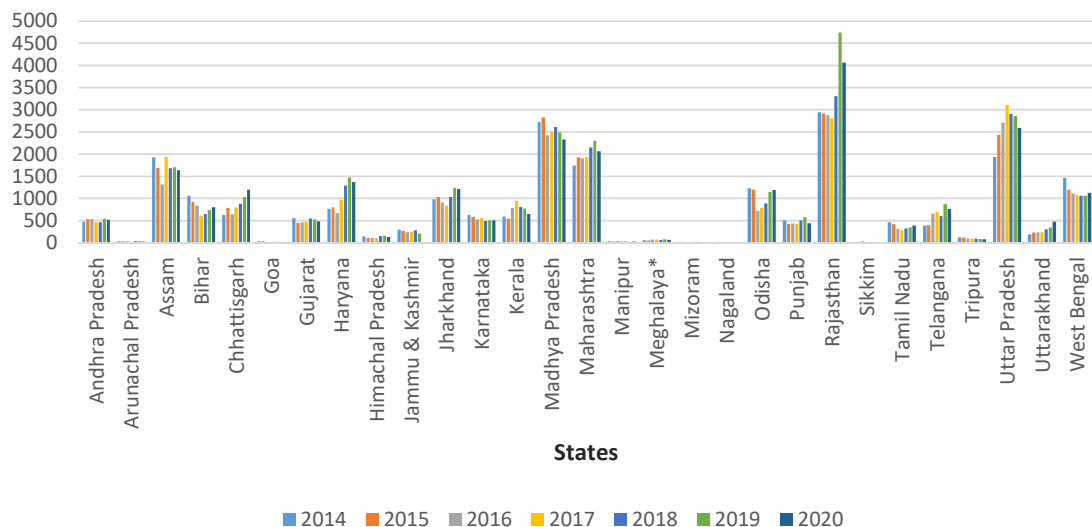


Fig. 11. Comparison of rape crime against women aged 18 and above (Adult) for all 29 states from 2014 to 2020

Studying the population normalised ratio we find that Kerala has the most rape cases registered against women aged 18 and above for all the year from 2014 to 2020 while Time Nadu has the least rate in 2014 and 2015 and Nagaland from 2016 to 2020. Figure 12 shows the graph of this comparison.

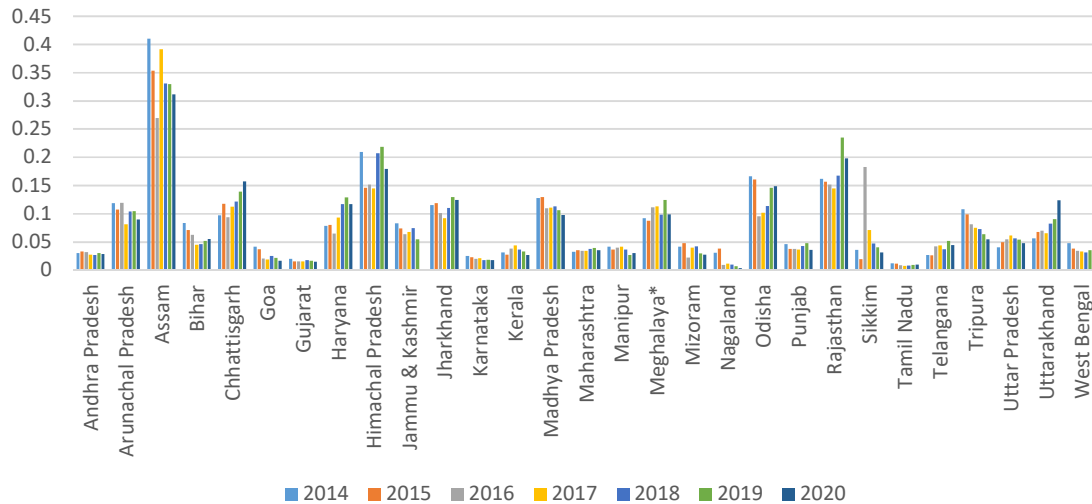


Fig. 12. Comparison of total rape crime against women aged 18 and above (Adult) with respect to population for each of the 29 states from 2014 to 2020

Studying the area normalised ratio we find that Assam has most rape cases against women aged 18 and above in 2014 and 2015, Kerala in 2016 and 2017, Haryana in 2018, 2019 and 2020 while Arunachal Pradesh has registered the least cases from 2014 to 2018 and Nagaland in 2019 and 2020. Figure 13 shows the graph of this comparison.

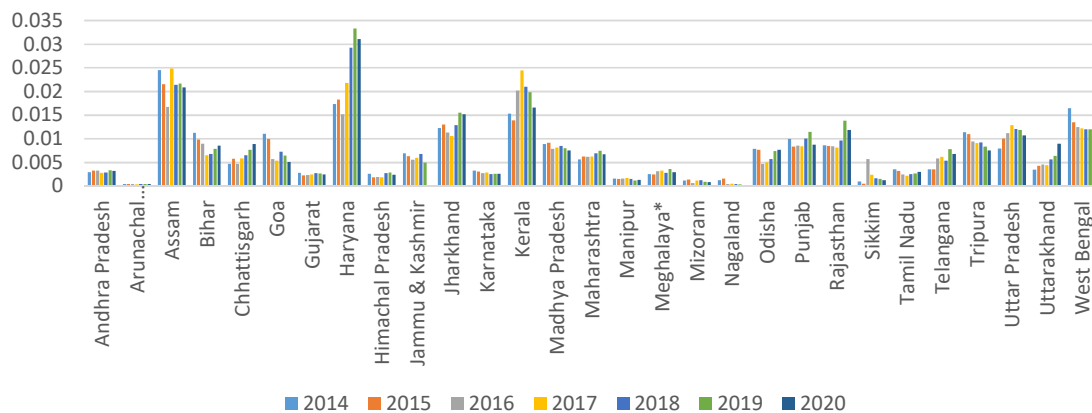


Fig. 13. Comparison of total rape crime against women aged 18 and above (Adult) with respect to area for each of the 29 states from 2014 to 2020

4. CONCLUSION

In our study we found that Madhya Pradesh and Uttar Pradesh have been the states with most crime against women while the states like Nagaland, Sikkim, Manipur, and Mizoram have reported least crime against women. The rate of crime is decreasing in states like Tripura and Goa at a fast rate on the other hand this rate is increasing consistently in Odisha which is a matter of concern. Rape in itself is a heinous crime and its trend should be decreasing. States like Tripura have shown a downward trend in the number of total rape cases registered, but the numbers are quite concerning for the states of Rajasthan. If we look at the trend of rape crimes against girl child and women, we find that Rajasthan, Madhya Pradesh and Kerala have an upward trend for rape cases against girl child and Rajasthan, Chhattisgarh, Haryana and Uttarakhand for adults while there is some good fall in these numbers for girl child in Arunachal Pradesh and for adults in the state of Karnataka and Tripura.

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