Comprehensive Crime Analysis of Key Urban Areas: Insights from Peroorkada, Medical College, Mannanthala, and Kazhakootam (2014–2021)

Introduction

Crime analysis plays a crucial role in understanding patterns, trends, and hotspots of criminal activities within a region. This report provides a comprehensive examination of crimes reported across four key police station areas: **Peroorkada**, **Medical College**, **Mannanthala**, and **Kazhakootam** from **2014 to 2021**. By analyzing data from these regions, this study aims to identify the most prevalent crimes, fluctuations over time, and critical areas requiring intervention. Insights derived from this analysis can help law enforcement agencies and policymakers prioritize resources, design preventive measures, and improve overall public safety.

Each area presents unique crime trends, reflecting its socio-economic, demographic, and geographic attributes. For instance, **Medical College**, a bustling urban zone, might exhibit higher incidents of theft and fraud, while **Mannanthala**, being relatively less urbanized, might report fewer crimes but show specific localized trends. This comparative study sheds light on such dynamics, enabling tailored strategies for crime mitigation.

Objectives

1. **Identify Crime Trends Over Time**:
   - To examine the year-wise fluctuation in total IPC (Indian Penal Code) crimes in each region and identify any notable increases or decreases.
2. **Determine Top and Least Prevalent Crimes**:
   - To analyze and rank the most and least reported crimes in each police station area, providing a clear understanding of recurring issues.
3. **Understand Crimes Against Women and Children**:
   - To focus on specific offenses such as **rape**, **sexual harassment**, and **kidnapping & abduction**, highlighting vulnerabilities and suggesting ways to enhance safety.
4. **Compare Crime Patterns Across Regions**:
   - To contrast the nature and frequency of crimes in the four regions and identify shared issues or unique trends in each area.
5. **Provide Insights for Policymaking**:
   - To derive actionable insights that can aid law enforcement agencies in resource allocation, community safety programs, and crime prevention strategies.
6. **Highlight Significant Crime Spikes**:
   - To pinpoint years or specific crimes that saw a sharp increase and investigate potential reasons for the surge.

Methodology

1. **Data Collection**:
   - The data was sourced from the **Kerala Police Official Website** (https://ps.keralapolice.gov.in), ensuring a credible and reliable dataset.
   - The dataset covers crimes reported in the **Peroorkada**, **Medical College**, **Mannanthala**, and **Kazhakootam** police station areas from **2014 to 2021**.
   - It includes comprehensive information about various crime categories, such as **dowry deaths**, **violence against women**, and **other IPC crimes**.
2. **Data Preprocessing**:
   - The collected data was initially **raw and unstructured**. Using **Microsoft Excel**, the data was:
     - **Structured** into a proper format with clear headers and organized rows and columns.
     - **Additional columns** were created to support deeper analysis (e.g., grouping crimes based on police stations).
   - Null values were checked, and it was confirmed that **there are no null values** in the dataset.
3. **Data Categorization**:
   - The dataset was classified based on the following parameters:
     - **Year-wise crime occurrences**: Grouped to analyze trends over the years.
     - **Category-wise crime counts**: Analyzed by crime type, such as dowry deaths, murders, and crimes against women and children.
     - **Focus on specific areas of interest**: Dowry deaths, violence against women (e.g., rape, molestation, sexual harassment), and other significant crime patterns were studied in detail.
4. **Data Analysis**:
   - Statistical and computational analysis was performed to achieve the objectives:
     - **Trends over Time**: Total crime counts were aggregated year-wise for each police station.
     - **Top and Least Crimes**: Categories were ranked to identify the most and least reported crimes.
     - **Crime Focus Areas**: Special attention was given to crimes like dowry deaths and violence against women.
   - Python libraries, including **Numpy**, **Pandas**, **Matplotlib**, were utilized for data manipulation and visualization.
5. **Visualization**:
   - Clear and professional visualizations, such as bar charts and line graphs, were created to present trends effectively.
   - Colors and chart styles were chosen to ensure clarity and professionalism, with labels and legends for readability.
   - Created a dynamic **POWER BI** dashboard for easy understanding through visual analysis
6. **Limitations**:
   - The analysis is based solely on reported crimes, and unreported or underreported cases are not considered.
   - The dataset represents specific police station areas, which may not fully reflect broader regional or state-wide trends.

CRIME DATA ANALYSIS

Crimes happened in the 4 urban areas from 2014–2021

OVERVIEW

The crime data across **Peroorkada**, **Medical College**, **Mannanthala**, and **Kazhakootam** police station areas from **2014 to 2021** reveals the following:

1. **Dominant Crime Categories**:
   - **Other IPC Crimes** (7,581) constitute the majority, indicating the prevalence of miscellaneous criminal offenses in these regions.
   - **Hurt** (835), **Cheating** (504), and **Molestation** (247) also feature prominently, reflecting significant occurrences of physical violence, fraud, and harassment.
2. **Crimes Against Women**:
   - **Rape** (83), **Molestation** (247), and **Sexual Harassment** (54) underline the need for continued efforts to ensure women's safety in the region.
   - **Kidnapping & Abduction of Women & Girls** (14) further highlights targeted gender-based crimes.
3. **Property-Related Crimes**:
   - **Theft** (228), **Theft - Other Theft** (218), **Auto Theft** (97), **Burglary** (81), and **Robbery** (81) collectively indicate a considerable number of property-related offenses.
4. **Rare or Negligible Crimes**:
   - Crimes such as **Dowry Deaths** (0), **Counterfeiting** (1), and **Criminal Breach of Trust** (5) are rare in occurrence.
5. **Violent Crimes**:
   - There were **32 attempts to commit murder**, and **17 murders** recorded, reflecting a relatively low but significant level of extreme violence.
   - **Riots** (213) indicate instances of mass disturbances that affect public order.
6. **Other Observations**:
   - Arson (15), Dacoity (9), and Kidnapping & Abduction of Others (1) are among the least-reported crimes.

While general crimes like **Other IPC Crimes**, **Hurt**, and **Cheating** dominate, crimes against women and property crimes require focused intervention. The rare occurrence of dowry deaths and counterfeiting suggests progress in those areas, but public safety and law enforcement efforts need to address the broader trends in violent and property-related offenses.

Top 5 Crimes happended in 4 areas (2014–2021)

The top 5 reported crimes in the **Peroorkada**, **Medical College**, **Mannanthala**, and **Kazhakootam** regions from **2014 to 2021** are as follows:

1. **Other IPC Crimes (7,581)**:
   - This category overwhelmingly dominates, indicating a significant number of miscellaneous offenses that do not fall under specific classifications but collectively account for the majority of crimes.
2. **Hurt (835)**:
   - Physical violence is a prominent issue, showing the need for preventive measures and stricter enforcement to curb interpersonal conflicts.

3. **Cheating (504)**:
   - Fraudulent activities are prevalent, reflecting issues related to financial scams, dishonesty in transactions, and deception.
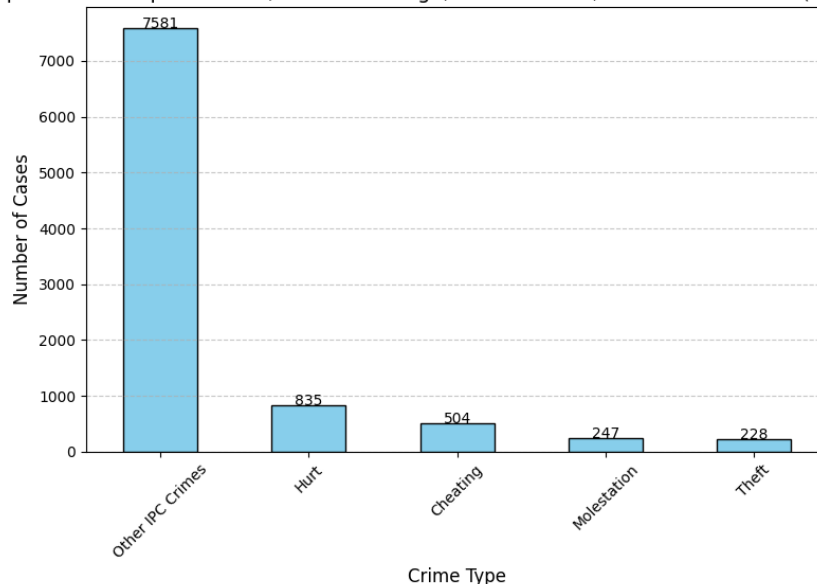4. **Molestation (247)**:
   - Crimes involving harassment and abuse, particularly targeting women, are alarmingly high and require focused safety measures and awareness campaigns.
5. **Theft (228)**:
   - Property-related offenses, including petty theft and burglaries, highlight the need for improved community vigilance and surveillance systems.

The data reveals that while miscellaneous crimes (Other IPC) dominate, violent offenses like **Hurt** and gender-based crimes such as **Molestation** remain areas of concern. Property crimes like **Theft** also point toward vulnerabilities in security. Addressing these issues will require tailored interventions, including public awareness, law enforcement reforms, and targeted crime prevention programs.

Top 5 Crimes in peroorkada, medical college, mannanthala, kazhakotam Areas (2014-2021)

Key Finding

- A total of 17 murder cases were registered across four specified areas between 2014 and 2021.
- There is no dowry death were reported in these years

POSITIVE FINDINGS ON MARTIAL SAFETY

The data indicates that there have been no recorded incidents of dowry deaths in the areas from 2014 to 2021. This absence of such crimes suggests a progressive social environment where the practice of dowry is not prevalent, contributing to a safer atmosphere for women entering into marriage.This finding reflects positively on the community's commitment to promoting healthy and respectful marital relationships, free from the pressures and violence often associated with dowry demands. As a result, marrying in this area can be seen as a safe and secure choice, fostering an environment of mutual respect and support.

CRIME ANALYSIS PEROORKADA   (2014-2020)

The data on Total IPC Crimes in Peroorkada over the years reveals interesting trends and raises concerns that require deeper attention. Below is a summary based on the numbers:

2014: High Crime Incidents (226 cases)

Key Insight: The year 2014 had a significantly high number of crimes, with 226 cases reported. This could indicate a year of increased criminal activity, possibly due to social, economic, or law enforcement-related factors.

Recommendation: A detailed analysis is required to understand what factors contributed to this spike. Possible areas for investigation could include law enforcement initiatives, economic conditions, or external events that might have contributed to this surge.

2015: Significant Drop (147 cases)

Key Insight: There was a noticeable decrease in total IPC crimes in 2015 compared to 2014, with 147 cases reported. This could indicate successful interventions by the police or a change in local conditions.

Recommendation: The local police may have implemented effective strategies in 2015 that led to a reduction in crimes, and it would be useful to identify and continue such initiatives.

2016: Slight Increase (210 cases)

Key Insight: The number of IPC crimes increased to 210 in 2016, indicating a rise in criminal activity. This increase may require a deeper dive into what drove the uptick.

Recommendation: Investigating the cause of this increase would be crucial. It may be linked to social or economic factors that led to a higher crime rate, requiring targeted interventions.

2017: Dramatic Decline (21 cases)

Key Insight: The sharp drop to 21 cases in 2017 is highly noteworthy and could suggest an anomaly, a significant law enforcement breakthrough, or changes in local policies.

Recommendation: Investigating the cause of this drastic decline is important. It could reflect successful crime prevention measures, a change in crime reporting, or an enforcement policy that should be studied and potentially replicated in other areas.

2018: Moderate Increase (96 cases)

Key Insight: The number of IPC crimes increased again in 2018 to 96, which is still relatively low compared to 2014 but higher than 2017. This may reflect a return to average crime levels after the sharp decline in 2017.

Recommendation: Continued focus on crime prevention and law enforcement initiatives is needed to prevent the escalation of crimes in 2018 and subsequent years.

2019-2020: Stability (145 and 128 cases)

Key Insight: From 2019 to 2020, the total IPC crimes hovered around 145 and 128 cases, showing a relatively stable trend. While it is not as high as the peak of 2014, the steady nature of these numbers could be a cause for concern if no improvements are seen.

Recommendation: It would be beneficial to analyze whether the interventions in previous years are continuing to work or whether there is a need for new strategies. A decline in crime is always desirable, so targeted efforts should continue.
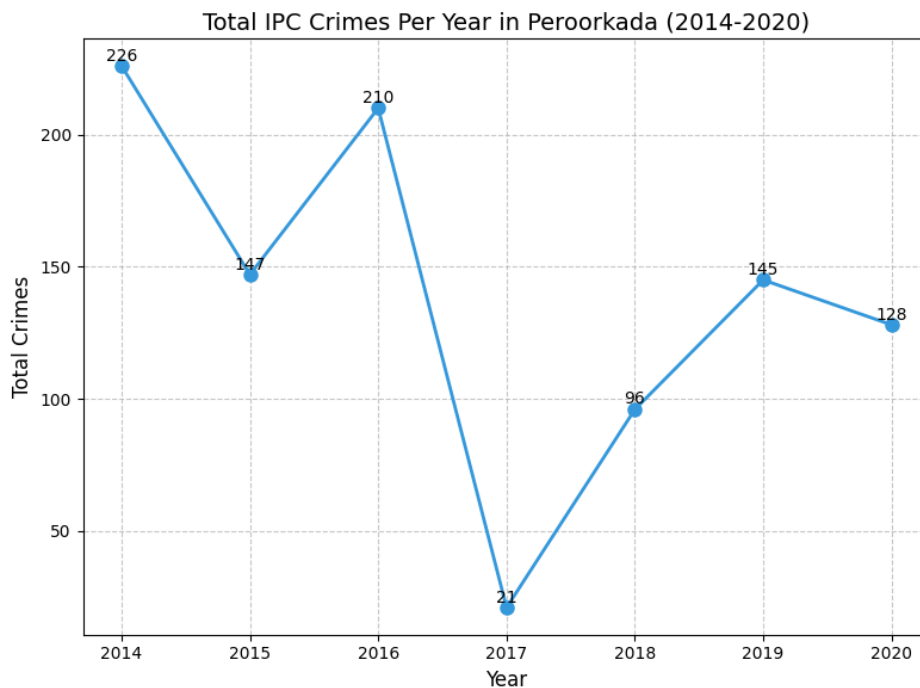
Overall Insight:

Fluctuating Crime Trends: The data shows fluctuating crime trends over the years, with both significant decreases (notably in 2017) and increases (in 2016). The fluctuation indicates the importance of consistent law enforcement and public safety initiatives.
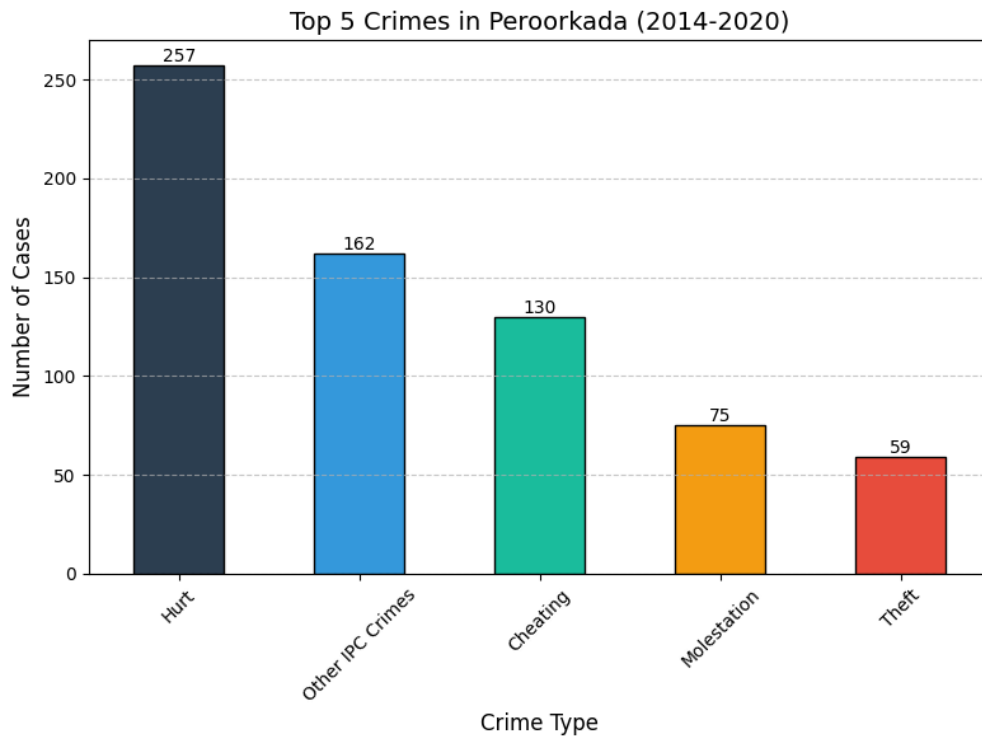
Effectiveness of Law Enforcement: The dramatic decrease in 2017 stands out as a potential success story for law enforcement strategies, which could be leveraged for future crime prevention policies.

Preventive Measures: Ongoing efforts should focus on understanding the drivers of crime spikes and maintaining or improving strategies that led to the decline in certain years (e.g., 2017).

Public Awareness and Social Interventions: Social factors such as awareness campaigns, education, and community engagement also play a key role in reducing crime.

Total IPC Crimes Per Year in Peroorkada (2014-2020)

TOP FIVE CRIMES HAPPENED IN PEROORKADA (2014-2021)

1.Hurt (257 cases): This is the most prevalent crime in Peroorkada, accounting for a significant number of cases. It indicates a notable issue with physical violence and altercations in the area. Efforts to address interpersonal conflicts and enforce stricter measures may help reduce these numbers.

2.Other IPC Crimes (162 cases): This category represents a broad spectrum of offenses under the Indian Penal Code. Its high number suggests the need for a more detailed breakdown to understand which specific crimes are driving this figure.

3.Cheating (130 cases): Cheating is a major concern, likely tied to fraudulent activities like scams, property disputes, or breach of trust. Public awareness campaigns and stricter penalties for financial or contractual fraud could help address this.

4.Molestation (75 cases): This crime highlights a serious concern regarding the safety and dignity of individuals, particularly women. Community policing, public surveillance, and stricter law enforcement can create a safer environment.
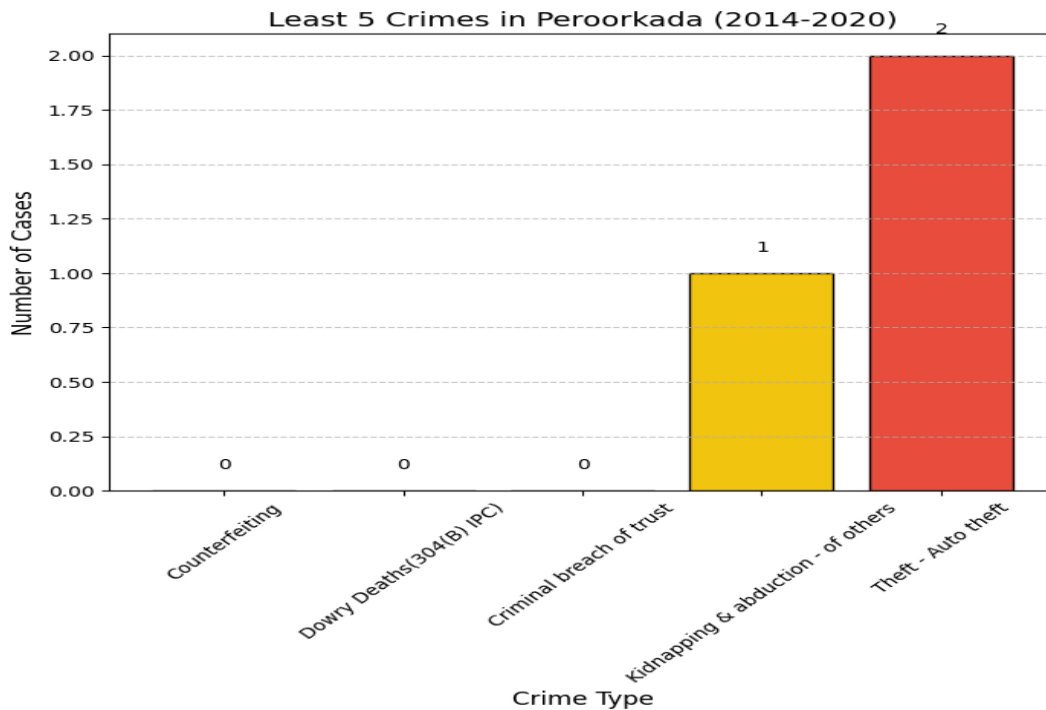
*5.Theft (59 cases):*Though ranked fifth, theft still represents a notable crime in Peroorkada. Increased patrolling, better security measures in residential and commercial areas, and public vigilance could deter such incidents.

Key Insights

- Crimes of physical violence and personal harm (like hurt and molestation) are particularly concerning, calling for enhanced community-level engagement and crime prevention programs.
- Economic and property-related offenses (cheating and theft) also require targeted interventions, such as public education on fraud prevention and improved law enforcement.

- A focus on addressing the root causes of these crimes, alongside awareness and law enforcement, could significantly reduce these numbers.

LEAST 5 CRIMES HAPPENED IN PEROORKADA (2014-2021)

1. *Zero Occurrences of Major Crimes:* Counterfeiting, Dowry Deaths (304B IPC), and Criminal Breach of Trust all have zero reported cases in the given time period.This indicates that these types of crimes are either not prevalent in the region or there might have been issues with reporting or recording.

Dowry Deaths not occurring might suggest effective community awareness or strong legal enforcement in the area.

2. *Low Incidence of Kidnapping & Abduction:* Kidnapping & Abduction - of Others was reported only once. While the figure is low, it still signals a potential area for concern. Kidnapping could be a crime tied to specific socio-economic factors or other local dynamics, so even a single case requires attention.

3. *Theft - Auto Theft:* Auto Theft was reported twice. Though this figure is still low, it might reflect the need for further investigation into vehicle security measures and possible improvements in the law enforcement response to such crimes.

Key Insights

- These low crime rates in this specific category could indicate effective policing, strong community vigilance, and potentially low levels of organized crime in Peroorkada.
- The zero occurrences of certain crimes such as counterfeiting or criminal breach of trust may also imply successful prevention mechanisms in place or, alternatively, could be due to underreporting or challenges in tracking certain types of criminal activity.
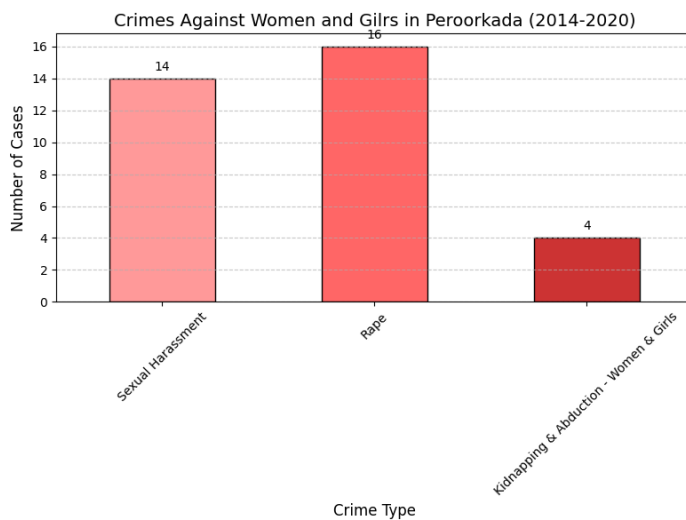
Recommendations:

Enhanced Awareness: Even though these crimes are infrequent, community outreach programs could further deter crimes like kidnapping and auto theft.

Focus on Vulnerable Areas: Though the figures are low, continuous monitoring is essential, especially for crimes that can escalate quickly, such as abduction and theft.

Overall, these numbers reflect a region that, while relatively safe in these particular categories, must remain vigilant against potential threats that could grow with socio-economic changes.

CRIMES AGAINST WOMEN AND GIRLS IN PEROORKADA (2014-2021)

The data for crimes against women in the Peroorkada region reveals significant concerns about safety and well-being.

1.Sexual Harassment (14 cases): Sexual harassment cases are notable, with 14 incidents reported in the 7-year period. This highlights the need for robust preventive measures like public awareness campaigns, women's safety initiatives, and ensuring strict enforcement of laws.

2.Rape (16 cases): With 16 cases of rape, this crime is the most frequent among those categorized as crimes against women. This emphasizes the need for targeted interventions, such as better street lighting, increased patrolling in vulnerable areas, and creating support systems for survivors.

2.Kidnapping & Abduction of Women and Girls (4 cases): Though the number of reported cases is lower, even a single instance of abduction can have a profound impact on community trust and women's sense of safety. Vigilance and quicker response times to reports of missing women and girls are crucial.

Key Insight

- Concerning Trend: With a total of 34 cases over 7 years, crimes against women are a significant category that requires attention in the Peroorkada region.

- Preventive Measures: Public spaces need to be made safer through surveillance systems (CCTVs), women-friendly infrastructure (e.g., safe public transport), and increased law enforcement visibility.
- Support Systems: Building support frameworks for survivors, such as counseling centers and quick reporting mechanisms, will empower women and foster trust in the system.
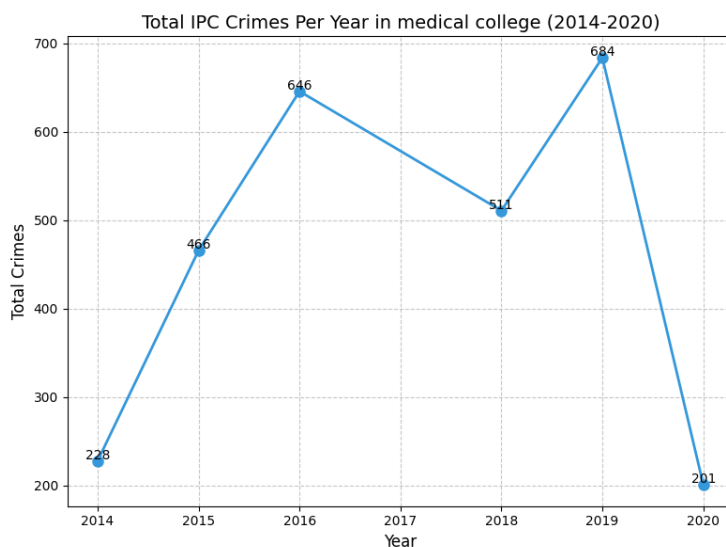
Policy Recommendations:

Awareness Campaigns: Educate the community about the consequences of gender-based violence and the importance of reporting incidents.

Police-Community Collaboration: Encourage partnerships between law enforcement and local communities to address safety concerns.

Empowering Women: Self-defense training programs, helplines, and legal aid can provide women with tools to protect themselves and seek justice.

These measures, if implemented, could significantly reduce the prevalence of crimes against women and ensure Peroorkada becomes a safer place for all its residents.

CRIME ANALYSIS MEDICAL COLLEGE (2014-2020)

Total IPC Crimes Per Year in medical college (2014-2020)

Insight on Total IPC Crimes in Medical College (2014-2020):

The data on Total IPC Crimes at Medical College from 2014 to 2020 presents a distinct pattern compared to other regions. Here's a detailed analysis of the trend:

High Initial Crime Incidents (228 cases): The year 2014 had a high number of 228 crimes reported. This could indicate the beginning of increasing crime concerns or a reflection of certain social factors contributing to crime in the area.

Recommendation: It may be important to investigate the contributing factors for the initial increase in crimes. The area could benefit from early intervention and crime prevention strategies.

Major Spike in Crimes (466 cases) : In 2015, there is a significant jump to 466 crimes, nearly doubling the previous year's figures. This could be indicative of a year where crime intensified, perhaps due to social, economic, or law enforcement factors.

Recommendation: Investigating the root causes of this sharp rise is essential. Public awareness, community engagement, and targeted policing efforts may help in reducing the crime surge in the following years.

Continuous Increase (646 cases): Crimes continued to rise in 2016, reaching 646 cases, marking a worrying upward trend. This indicates that crime may have been exacerbated by issues within the community, such as rising tensions, economic disparities, or ineffective policing strategies.

Recommendation: It is critical to understand the factors leading to such an increase. Public safety initiatives, stronger law enforcement, and community outreach could play a significant role in curbing the trend.

Slight Decrease (511 cases): There is a decrease to 511 crimes in 2018, indicating that the crime rate was somewhat controlled compared to the previous years. However, this number is still high and may reflect underlying issues that are not yet fully addressed.

Recommendation: Although there was a decrease, further attention is required to ensure this drop continues. Focus on crime prevention strategies, building trust within the community, and improving social interventions could help maintain the decline.

Highest Peak (684 cases): 2019 saw a sharp increase again to 684 crimes, the highest in the 2014-2020 period. This raises concerns that whatever efforts were put in place in previous years were not sufficient to reverse the upward trend.

Recommendation: In response to this peak, urgent action is needed. Policy changes, stronger law enforcement measures, and better community engagement may help stabilize the crime rate in future years.

Significant Decline (201 cases): 2020 saw a dramatic drop to 201 crimes, marking a sharp decline compared to previous years. This could be due to various factors such as the COVID-19 pandemic leading to lockdowns, reduced mobility, and fewer public gatherings.

Recommendation: While the decline is a positive sign, it may be temporary. It is important to analyze whether the decline is due to external factors (like the pandemic) or if it signals long-term improvements in crime prevention.
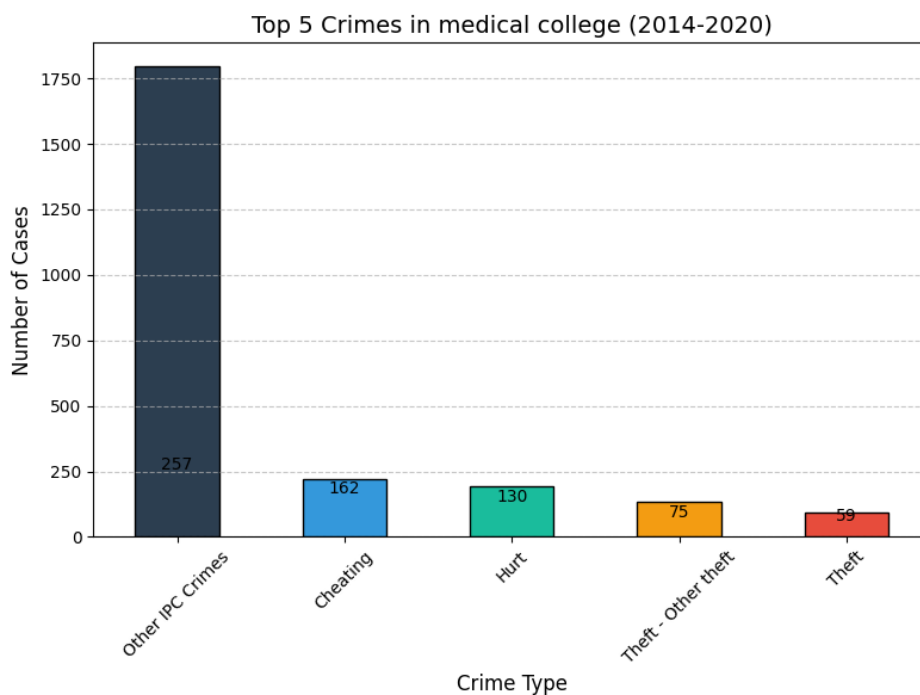
Overall Insight:

Increasing Trend until 2019: The period from 2014 to 2019 witnessed a continuous increase in crimes at Medical College, with the peak in 2019 at 684 cases. This suggests the need for more effective law enforcement and social intervention strategies.

Pandemic's Impact in 2020: The sudden decline in 2020 could be a result of the COVID-19 pandemic and subsequent lockdowns, which restricted movement and social interactions. While this decline is noteworthy, it is unclear whether it represents a sustained improvement or is just a temporary anomaly.

Need for Action: Despite the decline in 2020, the long-term trends show a clear need for better strategies to combat rising crime in the region. A multi-pronged approach involving law enforcement, community engagement, and social policies is required.

Sustained Prevention Measures: Strong crime prevention measures, especially in the face of public health crises, need to be planned to ensure the continuation of this downward trend, even after the pandemic's impact subsides.

TOP 5 CRIMES IN MEDICAL COLLEGE

Insight on Top 5 Crimes in Medical College (2014-2020):

The data on the Top 5 Crimes that occurred in Medical College from 2014 to 2020 reveals some concerning patterns regarding the types of crimes dominating this area. Here's a breakdown of the top 5 crimes:

1.Other IPC Crimes (1796 cases): Other IPC Crimes dominate the crime scene at Medical College, with a staggering total of 1796 cases. This category could encompass a wide range of offenses under the Indian Penal Code (IPC), suggesting a diverse criminal landscape. The large number could indicate a variety of crimes that are difficult to categorize or an issue with broader enforcement.

Recommendation: Investigating the types of offenses under "Other IPC Crimes" and breaking them down into specific sub-categories would be crucial to understanding what crimes are contributing to this figure. Targeted interventions should focus on addressing the most common and severe offenses under this broad category.

*2.Cheating (220 cases):*Cheating ranks second with 220 cases. This is concerning, especially in a setting like a medical college, where intellectual property and academic integrity should be prioritized.

The increase in cheating could reflect issues with unethical practices or exploitation in academic and professional environments.

Recommendation: Establishing better monitoring systems for academic and professional conduct, along with increased awareness about the legal consequences of cheating, could help in reducing these incidents.

3.Hurt (193 cases): Hurt accounts for 193 incidents, indicating that violence or physical altercations may be common. This could involve interpersonal disputes, physical aggression, or other forms of harm. It's particularly concerning in an academic and professional environment like a medical college, where safety and respect should be fundamental values.

Recommendation: Preventive measures to reduce violence, such as conflict resolution training, awareness programs, and improving student well-being, could help in reducing these numbers. Additionally, promoting a healthy and safe environment at the institution should be prioritized.

4.Theft - Other Theft (134 cases): Other Theft accounted for 134 crimes. This may involve a variety of property-related crimes, including petty thefts, shoplifting, or thefts from personal spaces. Such crimes can lead to a sense of insecurity and could reflect lapses in the enforcement of public safety measures.

Recommendation: Strengthening security measures within the campus (e.g., surveillance systems, stricter monitoring of entry/exit points) and implementing awareness programs on theft prevention could help curb this issue.

5.Theft (93 cases): Theft ranks fifth with 93 cases. This suggests that theft-related crimes, though not as rampant as other offenses, are still a significant concern. This may include burglary, pickpocketing, or other forms of theft within or around the campus.

Recommendation: More robust surveillance, as well as encouraging a sense of shared responsibility for campus security, could help reduce theft-related crimes. Increased vigilance among students and staff members could be key in combating these incidents.

Overall Insights:

Prevalence of Diverse Crimes: Other IPC Crimes dominate the crime landscape at Medical College, pointing to a wide range of offenses that may not be easy to categorize but still warrant focused attention. It would be beneficial to further analyze the subcategories of these crimes for more targeted interventions.

Violence and Physical Harm: Crimes like Hurt highlight the presence of interpersonal violence, which might indicate issues related to aggression, student relationships, or stress. Strategies to promote conflict resolution and better student support systems are necessary.

Academic and Ethical Issues: The prominence of Cheating in the list reflects potential integrity issues within the academic system, making it essential to reinforce ethical standards and academic honesty.

Property Crimes: Both Theft and Other Theft suggest that property-related crimes are a notable concern, pointing to a need for improved security and preventative measures.

Key Recommendations:

Investigation of "Other IPC Crimes": A deeper understanding of what constitutes these crimes and their specific sources will help in formulating focused strategies.

Enhanced Campus Security: Invest in better surveillance and security protocols to prevent theft and property-related crimes.

Promote Academic Integrity: Emphasize the importance of academic honesty through awareness campaigns, strict enforcement, and clear consequences for unethical behavior.

Conflict Resolution Programs: Introduce programs and services aimed at reducing physical altercations, such as peer mediation, counseling, and stress management workshops.

LEAST 5 CRIME IN MEDICAL COLLEGE

The absence of Counterfeiting, Dowry Deaths (304B IPC), Dacoity, Arson, and Kidnapping & Abduction - of Others in the Medical College area from 2014-2020 suggests a relatively safe and stable environment.
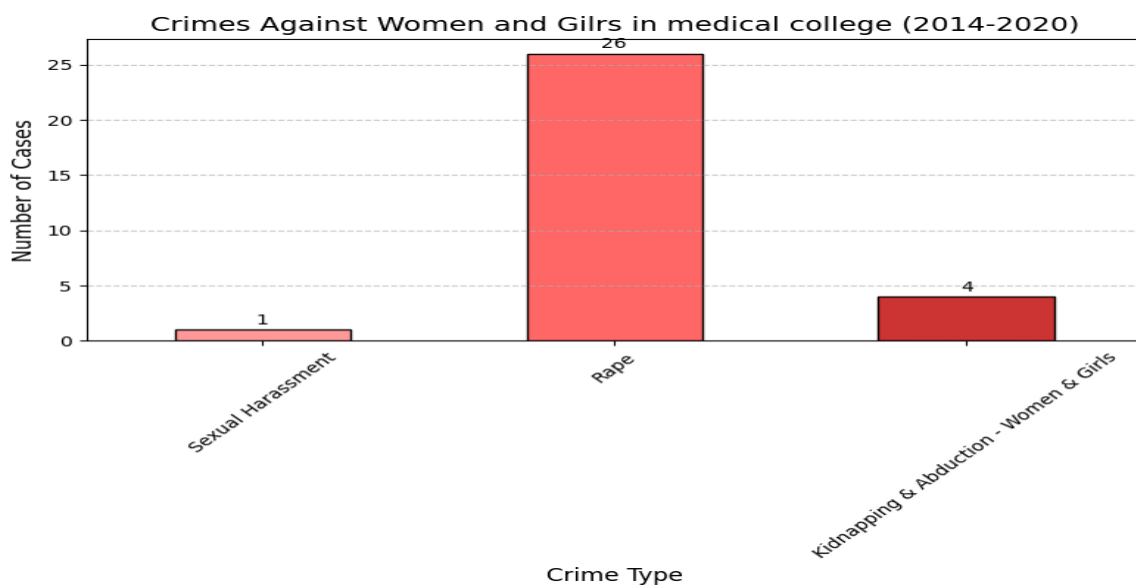
Effective Law Enforcement: Strong police presence and surveillance likely deterred criminal activities.

Community Awareness: Educational institutions, such as the medical college, may have fostered social awareness, especially regarding issues like dowry deaths.

Preventive Measures: Strong fire safety protocols and anti-violence measures may have reduced the risk of arson and dacoity.

Social Stability: The area's socio-economic factors, including a stable community and lower crime opportunities, contribute to the low incidence of these crimes.

CRIME AGAINST WOMEN AND GIRLS IN MEDICAL COLLEGE (2014-2020)

Crimes Against Women and Gilrs in medical college (2014-2020)

The data shows that crimes against women in the Medical College area from 2014 to 2020 include:

- Kidnapping & Abduction of Women & Girls: 4 cases
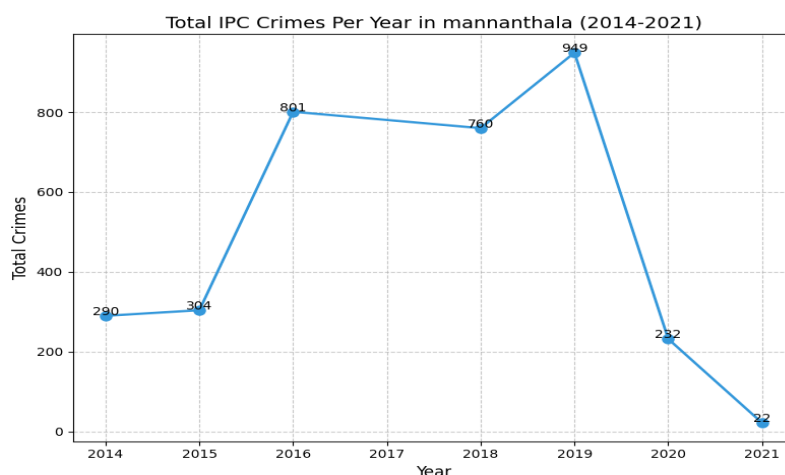- Sexual Harassment: 1 case
- Rape: 26 cases

Insight:

Significant Concern for Rape: The 26 rape cases highlight that sexual violence remains a serious concern in the Medical College area. Despite efforts to curb such crimes, the relatively high number underscores the importance of reinforcing preventive measures, including stronger law enforcement and victim support services.

Low Incidence of Sexual Harassment: The single sexual harassment case could point to underreporting or insufficient awareness around such issues. It may also reflect positive outcomes from awareness campaigns or community initiatives aimed at addressing and preventing harassment.

Kidnapping & Abduction of Women & Girls: 4 cases of kidnapping suggest that while this is a less frequent crime, it still poses a significant risk. Preventive measures such as improved public safety initiatives, community vigilance, and law enforcement could be further emphasized to address these incidents.

Crimes against women, including rape, kidnapping, and sexual harassment, are present in the Medical College area. The rape cases remain a key concern and call for continuous efforts to strengthen protective measures, awareness programs, and legal frameworks to safeguard women and ensure their safety.

CRIME ANALYSIS MANNANTHALA (2014-2021)

Total IPC Crimes Per Year in mannanthala (2014-2021)

Insights on Total IPC Crimes in Mannanthala (2014-2021):

Spike in Crime in 2016 and 2019: 2016 saw a significant jump in crimes, with 801 cases, marking a substantial increase from previous years.

The crime rate peaked again in 2019, reaching 949 cases, the highest across the given years. This could indicate a lapse in law enforcement, socio-economic challenges, or other factors that require further investigation.

Sharp Decline in 2020 and 2021: After the peak in 2019, there was a dramatic drop to 232 cases in 2020 and just 22 cases in 2021. This decline could be attributed to the COVID-19 pandemic, which restricted movement and potentially reduced opportunities for crime.

Steady Crime Levels Before 2016: From 2014 to 2015, crime levels remained relatively consistent, with 290 cases in 2014 and a slight increase to 304 cases in 2015. This suggests a stable law enforcement mechanism during these years.

Gradual Rise in Crime (2014-2019): Despite the stability in earlier years, there was a steady upward trend leading to the sharp rise in 2016 and the subsequent peak in 2019, indicating the need for proactive crime prevention strategies.
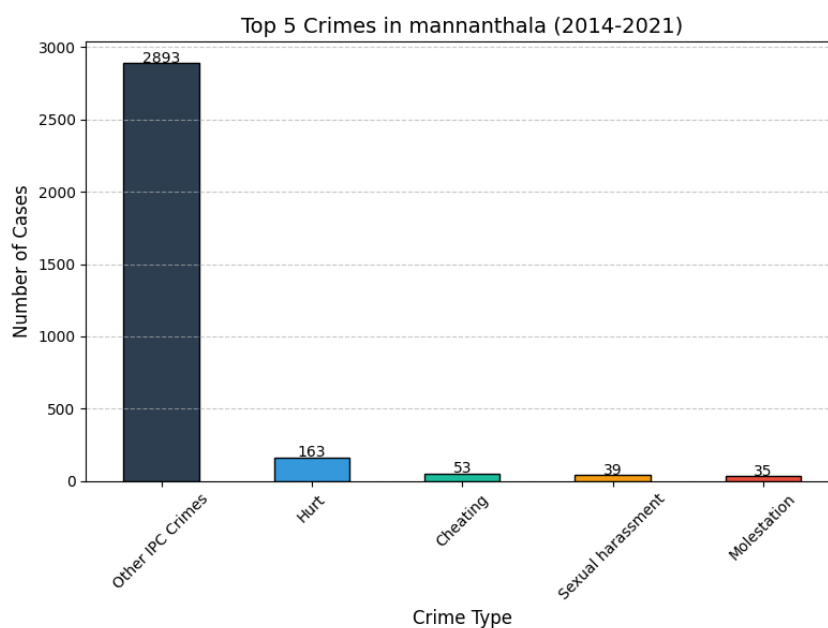
Key Takeaways:

Policy and Policing Adjustments: The significant rise in 2016 and 2019 highlights the need to analyze the root causes of crime spikes during these years.

Impact of External Factors: The sharp decline in 2020 and 2021 could be tied to pandemic-related restrictions, offering insights into how societal changes influence crime.

Focus Areas for Improvement: Sustaining the low crime rates observed in 2021 requires continued vigilance, efficient policing, and community engagement.

The data suggests fluctuating crime trends in Mannanthala, emphasizing the need for dynamic strategies to maintain law and order.

TOP 5 CRIMES HAPPENED IN MANNANTHALA (2014-2021)

Top 5 Crimes in mannanthala (2014-2021)

Insights on Top 5 Crimes in Mannanthala (2014-2021):

Dominance of Other IPC Crimes: "Other IPC Crimes" account for a staggering 2,893 cases, making it by far the most prevalent category. This could indicate a wide range of less-defined or miscellaneous offenses that require a deeper breakdown for targeted interventions.

Hurt as a Major Concern: With 163 cases, crimes involving hurt are a significant issue, pointing to conflicts or violent altercations in the area. This highlights the need for community conflict resolution programs and stricter enforcement against physical violence.

Cheating Cases: The 53 cases of cheating reflect concerns about fraudulent activities, such as scams or economic crimes. Public awareness campaigns and stricter financial crime monitoring could help address this issue.
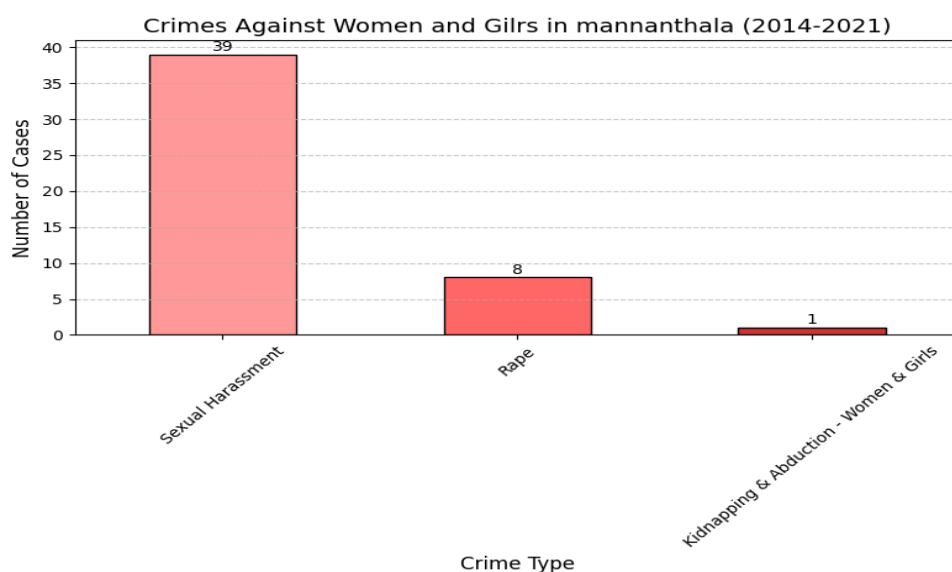
Crimes Against Women: Sexual harassment (39 cases) and molestation (35 cases) are alarming and indicate that crimes against women remain a considerable challenge. These numbers call for:

- Improved safety measures for women in public spaces.
- Awareness campaigns encouraging reporting of such crimes.
- Swift action to ensure justice for victims.
- Community and Law Enforcement Priorities:
- The variety of crimes suggests a need for targeted initiatives:
- Focused crime prevention for violent offenses.
- Education and economic development to address fraud.
- Programs addressing gender-based violence and ensuring women's safety.

Key Takeaway:

The crime trends in Mannanthala underscore the importance of addressing violent crimes, fraud, and crimes against women. A comprehensive approach combining enforcement, education, and community engagement is essential to improving safety and reducing these crimes.

CRIME AGAINST WOMENS AND GIRLS

Crimes Against Women and Gilrs in mannanthala (2014-2021)

Insights on Crimes Against Women and Children in Mannanthala (2014-2021):

Sexual Harassment is the Leading Concern: With 39 reported cases, sexual harassment constitutes the most significant portion of crimes against women and children in Mannanthala. This indicates a pressing need to improve public safety measures, awareness campaigns, and stricter penalties for offenders.

Rape Cases: Although fewer in number (8 cases), each instance of rape represents a severe crime with lasting impacts on victims. These numbers stress the importance of encouraging reporting, offering victim support, and expediting judicial processes.
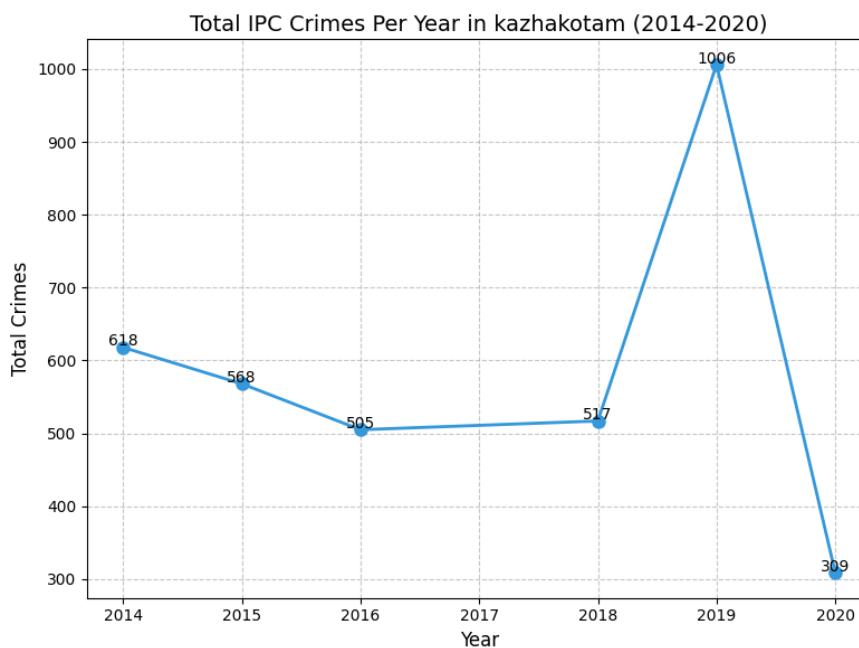
Low Cases of Kidnapping & Abduction: 1 reported case of kidnapping & abduction of women and girls suggests that while this crime is less prevalent, vigilance is still necessary to ensure that such incidents remain rare.

Overall Trends: While the numbers are relatively low, crimes against women and children are critical issues that require continuous attention. Many such crimes often go unreported due to societal stigma, highlighting the need for:

- Increased awareness and empowerment programs for women and children.
- Creation of safe reporting mechanisms.
- Enhanced police presence in vulnerable areas.

Key Takeaway: Crimes against women and children, though not the most prevalent in Mannanthala, demand urgent and focused intervention. Addressing sexual harassment and strengthening community awareness and law enforcement can significantly enhance safety and well-being in the region.

CRIME ANAYSIS KAZHAKOTAM(2014-2020)

Total IPC Crimes Per Year in kazhakotam (2014-2020)

nsights on Total IPC Crimes in Kazhakotam (2014-2020):

High Crime Rate in 2014: 2014 recorded 618 cases, one of the highest during the observed period. This indicates that crime levels were already significant at the start of the observation period.

Steady Decline (2014-2016): Between 2014 and 2016, the crime rate steadily declined from 618 to 505 cases. This could indicate improvements in policing, community engagement, or preventive measures during this period.
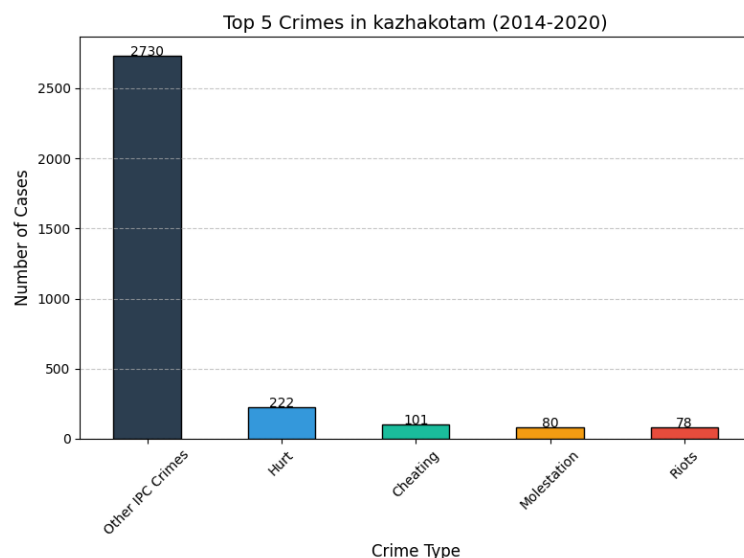
Slight Resurgence in 2018: After the decline, 2018 saw an increase to 517 cases, signaling a need for further investigation into contributing factors, such as population growth or specific crime patterns.

Spike in 2019: 2019 saw a dramatic surge in crime, reaching 1,006 cases, nearly doubling from the previous year. This sharp increase suggests a significant breakdown in law enforcement or a rise in specific criminal activities requiring targeted action.

Sharp Decline in 2020: Crime rates dropped significantly in 2020, falling to 309 cases, the lowest in the observed period. The COVID-19 pandemic likely played a major role in restricting mobility and opportunities for crime.

Key Takeaway: Kazhakotam experienced fluctuating crime rates during 2014–2020, with a notable spike in 2019 and a sharp decline in 2020. Sustained focus on community safety measures and law enforcement, particularly addressing the causes of the 2019 surge, is crucial to maintaining lower crime levels.

TOP 5 CRIMES HAPPENED IN KAZHAKOTAM

Insights on Top 5 Crimes in Kazhakotam (2014-2020):

Prevalence of Other IPC Crimes: "Other IPC Crimes" dominate the crime statistics with a staggering 2,730 cases, suggesting a wide range of undefined or miscellaneous offenses. This requires a detailed breakdown to identify specific recurring issues for effective intervention.

Hurt is a Significant Concern: With 222 cases, crimes involving hurt reflect frequent violent altercations or physical assaults in the region. This highlights the need for conflict resolution initiatives and stricter enforcement to reduce physical violence.

Cheating Cases: 101 cases of cheating indicate a notable presence of fraudulent activities, such as scams or economic crimes. Focused efforts on financial crime prevention and public awareness can help address this issue.

Crimes Against Women: Molestation (80 cases) points to a troubling concern for women's safety in Kazhakotam. This emphasizes the importance of:

- Increased surveillance in public spaces.
- Encouraging reporting of such crimes.
- Programs and initiatives aimed at reducing gender-based violence.

High Incidence of Riots: 78 cases of riots indicate frequent disturbances and public unrest. This requires community-level interventions, better policing during high-tension situations, and efforts to promote harmony among residents.

Key Takeaway: The top crimes in Kazhakotam highlight a mix of violent crimes, fraud, and crimes against women. Addressing physical violence, improving women's safety, and breaking down the components of "Other IPC Crimes" will be key to creating a safer environment in the region.

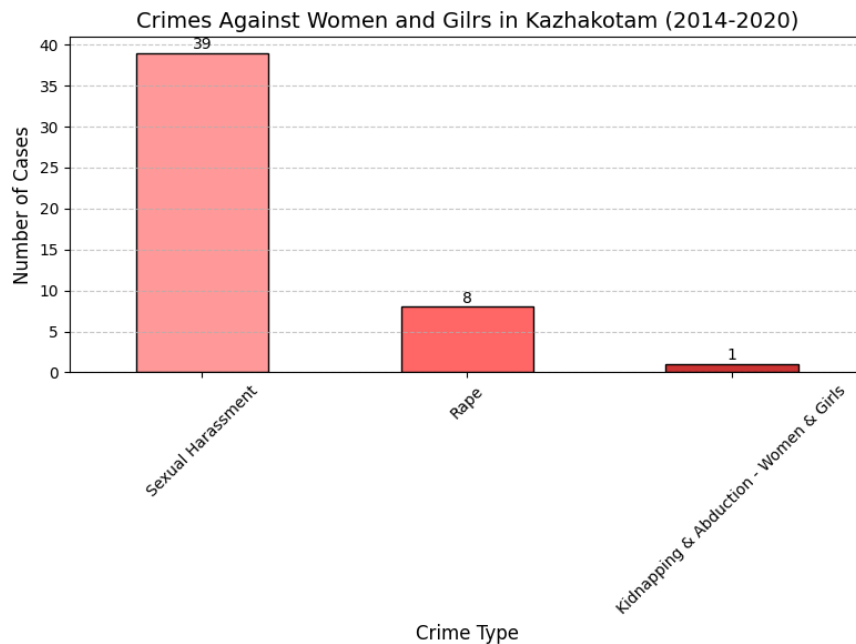**Least Crimes in Medical College (2014-2020):**

No Incidents Reported: Counterfeiting, Theft (Other theft), Dowry Deaths, Sexual Harassment, and Kidnapping & Abduction (of others) all reported 0 incidents during this period.

Implications:

- *Low Occurrence of Certain Crimes:* The absence of these crimes suggests effective preventive measures, better security systems, or underreporting in the area.
- *Cultural/Situational Factors:* Crimes like dowry deaths may not align with the demographics or socio-economic characteristics of the area surrounding the medical college.

*Key Takeaway:*The medical college area appears to have a very low incidence of serious or targeted crimes, potentially reflecting a safe environment or specific characteristics of the locality.

CRIME AGAINST WOMEN AND GIRLS IN KAZHAKOTAM(2014-2020)

Crimes Against Women and Gilrs in Kazhakotam (2014-2020)

Insights on Crimes Against Women in Kazhakotam (2014–2020):

High Incidence of Rape: With 33 reported cases, rape is a significant concern in Kazhakotam. This underscores the urgent need for better safety measures, awareness campaigns, and expedited judicial proceedings to ensure justice and deter such crimes.

Kidnapping & Abduction of Women & Girls: 5 reported cases of kidnapping and abduction reflect potential vulnerabilities in public safety and the need for proactive measures to protect women and girls, especially in high-risk areas.

No Reported Cases of Sexual Harassment: The absence of reported cases of sexual harassment may not necessarily indicate the absence of such crimes but could point to underreporting due to stigma or lack of trust in the legal system. Encouraging victims to come forward through safe reporting mechanisms is crucial.

Key Takeaway: While the number of crimes against women in Kazhakotam may seem relatively low compared to other regions, rape remains a major issue. Ensuring women's safety, empowering them to report crimes, and addressing societal stigma are essential steps toward reducing these offenses and building a safer community.