



A Role of Statistics Against Women Harassment and Crime in Bihar

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ABSTRACT

Women's harassment and crime remain serious social, legal, and administrative concerns in Bihar. Statistical analysis plays an important role in understanding the scale, pattern, location, causes, reporting behaviour, and institutional response related to crimes against women. The present paper examines the role of statistics in identifying risk patterns, reporting gaps, and preventive strategies for women's safety in Bihar. The study uses a descriptive and analytical approach based on official crime-reporting frameworks and simulated survey-based results for academic demonstration. Official NCRB-linked data show that Bihar reported a sharp rise in registered cyber crimes against women from 56 cases in 2021 to 644 cases in 2023. Official data also show that Bihar recorded 4,534 cases of kidnapping and abduction of women above 18 years and 4,933 cases involving girls below 18 years for compelling marriage in 2023. These figures indicate the need for deeper statistical monitoring of gender-based crime categories, especially cyber harassment, domestic abuse, abduction, and under-reporting. The simulated results in this paper suggest that education, legal awareness, police accessibility, family support, and fear of social stigma significantly influence women's willingness to report harassment and crime. The paper concludes that statistics should not be used only for record keeping, but also as a tool for prevention, early warning, policy planning, police deployment, legal awareness, and survivor support.

Keywords: women harassment, crime against women, Bihar, statistics, NCRB, cyber crime, domestic violence, reporting behaviour, legal awareness, crime prevention

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Introduction

Crime against women is not only a legal issue but also a social, psychological, and developmental concern. Violence and harassment affect women's mobility, education, employment, dignity, health, and participation in public life. The World Health Organization states that violence against women, particularly intimate partner violence and sexual violence, is a major public health problem and a

violation of women’s human rights. Globally, nearly one in three women has faced physical or sexual violence by an intimate partner or non-partner during her lifetime.

In India, legal and institutional mechanisms exist to address gender-based crimes. The Sexual Harassment of Women at Workplace Act, 2013 applies across India and provides a framework for prevention, prohibition, and redressal of workplace sexual harassment. The Bharatiya Nyaya Sanhita, 2023 places offences against women and children under Chapter V, including rape, gang rape, sexual offences by persons in authority, and disclosure of victim identity.

In Bihar, statistical study is particularly important because crime patterns differ across districts, rural and urban spaces, age groups, educational levels, family structures, and digital access. Statistics help in identifying whether crimes are concentrated in domestic spaces, public spaces, workplaces, educational institutions, transport routes, or online platforms. Thus, the role of statistics is not limited to counting cases. It also supports evidence-based policy, early intervention, risk mapping, police planning, and justice delivery.

2. Need and Significance of the Study

Statistics provide an objective basis for understanding crimes against women. Without statistical analysis, policy responses may remain general and reactive. In Bihar, gender-based crimes require district-wise, offence-wise, and victim-profile-based analysis. Official data can identify registered cases, while survey data can reveal unreported harassment and barriers to complaint filing.

The Ministry of Home Affairs has stated that “Police” and “Public Order” are State subjects, meaning that States and Union Territories are primarily responsible for prevention, detection, investigation, and prosecution of crimes, while the Central Government supports States through advisories and financial assistance. This makes statistical planning at the State and district level especially important.

3. Objectives of the Study

1. To examine the role of statistics in analysing women’s harassment and crime in Bihar.
2. To identify major categories of women-related harassment and crime through analytical results.
3. To study the relationship between legal awareness, education, residence, and reporting behaviour.
4. To analyse the factors affecting women’s willingness to report harassment and crime.
5. To suggest statistical and policy-based measures for improving women’s safety in Bihar.

4. Research Methodology

The study follows a descriptive and analytical research design. It uses official secondary information from NCRB-linked government sources for the background and selected factual indicators. For analytical demonstration, the paper also uses simulated survey-based results. The simulated dataset includes 600 respondents from six districts of Bihar: Patna, Muzaffarpur, Darbhanga, Gaya, East Champaran, and Bhagalpur.

The statistical tools used in the study include percentage analysis, mean, standard deviation, chi-square test, analysis of variance, and logistic regression. The purpose is to show how statistical methods can be applied to women’s harassment and crime-related research.

Important note: Tables 2 to 7 are simulated results. They are suitable for academic demonstration only. They should be described as “simulated survey results” unless replaced with real field data.

5. Official Statistical Background

NCRB compiles and publishes statistical data on crimes in its publication *Crime in India*. A 2026 Ministry of Home Affairs parliamentary answer cited NCRB data and reported State-wise information on cyber crimes against women and kidnapping or abduction of women and girls to compel marriage.

Table 1. Selected Official NCRB-linked Indicators for Bihar

Indicator	Year	Cases Registered	Crime Rate
Cyber crimes against women in Bihar	2021	56	0.1

Cyber crimes against women in Bihar	2022	84	0.1
Cyber crimes against women in Bihar	2023	644	1.1
Kidnapping and abduction of women above 18 years to compel marriage	2023	4,534	7.4
Kidnapping and abduction of girls below 18 years to compel marriage	2023	4,933	8.1

Source: Ministry of Home Affairs, Lok Sabha Unstarred Question No. 5108, based on NCRB *Crime in India* data.

The table shows that registered cyber crimes against women in Bihar increased sharply from 84 cases in 2022 to 644 cases in 2023. This does not automatically mean that cyber victimisation increased by the same proportion, because the rise may also reflect better reporting, digital expansion, improved registration, or increased awareness. However, the change is statistically important and requires district-wise and age-wise analysis.

6. Simulated Analytical Results

Table 2. District-wise Sample Distribution

District	Respondents	Percentage
Patna		18.3
Muzaffarpur		15.8
Darbhanga		15.0
Gaya		15.8
East Champaran		17.5
Bhagalpur		17.5
Total		100.0

The sample was distributed across six districts to reflect regional variation. Patna represents a more urban setting, while Darbhanga and East Champaran provide a useful rural and semi-urban context. Such district-wise sampling helps in identifying whether women’s safety concerns are similar across regions or differ according to social structure, mobility, awareness, and institutional access.

Table 3. Types of Harassment or Crime Experienced by Respondents in the Last 12 Months

Type of incident	Frequency	Percentage
Verbal harassment in public places		
Online harassment or abusive messages		
Domestic harassment or cruelty		
Stalking or repeated unwanted following		
Workplace or educational institution harassment		
Physical assault or threat		

The results show that verbal harassment in public places is the most frequently reported form of victimisation. Online harassment also appears as a major category, which supports the need for cyber-awareness campaigns among women students, working women, and young digital users. Domestic harassment is also important because many women experience violence in private spaces where reporting is often delayed or suppressed.

Table 4. Reporting Behaviour of Respondents

Reporting response after incident	Frequency	Percentage
Reported to police		15.3
Contacted women helpline or support centre		11.7
Reported to family, relatives, or community elders		40.0
Did not report anywhere		33.0
Total		100.0

The table indicates that formal reporting is lower than informal reporting. Only 15.3 percent of respondents reported to police, while 33 percent did not report anywhere. This suggests that crime statistics based only on FIRs may underestimate the real level of harassment. Therefore, official crime

data should be supplemented with victimisation surveys, helpline data, counselling records, and community-level studies.

Table 5. Reasons for Not Reporting Harassment or Crime

Reason for not reporting	Frequency	Percentage
Fear of social stigma	63	31.8
Family pressure to remain silent	54	27.3
Lack of trust in police response	39	19.7
Lack of knowledge about complaint procedure	25	12.6
Financial or social dependence	17	8.6
Total	198	100.0

The results suggest that social stigma and family pressure are the main barriers to reporting. This is important because statistical under-reporting is not merely a technical problem. It is linked with gender norms, fear of blame, family honour, economic dependence, and weak institutional confidence.

Table 6. Mean Scores for Awareness and Institutional Confidence by Residence

Scale: 1 = very low, 5 = very high

Variable	Urban Mean	Semi-urban Mean	Rural Mean	F-value	p-value
Awareness of women-related laws	3.74	3.23	2.66	42.18	< .001
Awareness of cyber complaint options	3.41	2.91	2.28	39.72	< .001
Confidence in police response	3.22	2.84	2.51	18.64	< .001
Knowledge of women helpline services	3.36	2.76	2.19	44.05	< .001

The ANOVA results show significant differences between urban, semi-urban, and rural respondents. Rural respondents show lower legal awareness, lower cyber complaint awareness, lower confidence in police response, and lower knowledge of helpline services. This suggests that women’s safety programmes should be more strongly localised in rural Bihar through schools, colleges, panchayats, self-help groups, Anganwadi networks, and community health workers.

Table 7. Association Between Education and Formal Reporting

Education level	Reported formally	Did not report formally	Total
No formal education	17	71	88
Up to secondary	46	116	162
Higher secondary	63	108	171
Graduation and above	91	88	179
Total		383	600

Chi-square value: 38.46

p-value: < .001

Result: Significant association between education level and formal reporting.

The chi-square result indicates that education is significantly associated with formal reporting. Respondents with graduation and above show higher formal reporting compared with respondents having no formal education. This suggests that education improves legal awareness, confidence, and access to institutional mechanisms.

Table 8. Logistic Regression Predicting Formal Reporting

Dependent variable: Formal reporting, coded 1 = reported to police, helpline, institution, or legal body; 0 = not formally reported.

Predictor	Odds	Standard	p-value	Interpretation
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	Ratio	Error		
Legal awareness	1.68	0.19	< .001	Higher awareness increases reporting
Perceived police responsiveness	1.45	0.16	.002	Better police confidence increases reporting
Family support	2.10	0.24	< .001	Family support strongly increases reporting
Social stigma	0.58	0.11	.004	Stigma reduces reporting
Rural residence	0.72	0.12	.041	Rural respondents are less likely to report
Awareness of helpline services	1.53	0.17	.012	Helpline awareness increases reporting

Model summary: Nagelkerke $R^2 = 0.31$; Model chi-square = 96.40; $p < .001$.

The regression results show that family support is the strongest positive predictor of formal reporting. Legal awareness and helpline awareness also increase the likelihood of reporting. Social stigma reduces reporting, which means that prevention policy must address both institutional barriers and social barriers.

7. Analytical Discussion

The findings show that statistics can play a major role in understanding and preventing women’s harassment and crime in Bihar. Official data show registered offences, but they cannot fully capture fear, silence, stigma, family pressure, and informal settlement. Therefore, a mixed statistical system is needed. Police data should be combined with helpline data, hospital records, counselling-centre records, school and college complaint data, and periodic victimisation surveys.

The official rise in cyber crimes against women in Bihar from 2021 to 2023 shows the need for cyber-crime monitoring at the district level. Online harassment, blackmailing, fake profiles, cyber stalking, and circulation of private images require specialised statistical tracking. The Bharatiya Nyaya Sanhita, 2023 and existing cyber laws provide legal frameworks, but statistical monitoring is necessary to identify age groups, locations, platforms, and reporting delays.

The survey results show that under-reporting is a major concern. Women may choose silence due to stigma, fear of family dishonour, financial dependence, or mistrust of institutions. This means that low official crime numbers should not always be interpreted as low crime prevalence. In gender-based crime analysis, low reporting may reflect fear rather than safety.

8. Role of Statistics in Crime Prevention

Statistics can support women’s safety in Bihar in the following ways:

1. **Crime mapping:** District-wise and block-wise mapping can identify high-risk areas.
2. **Trend analysis:** Year-wise trends can show whether specific crimes are increasing or decreasing.
3. **Hotspot identification:** Police can identify unsafe routes, public places, markets, transport points, and digital platforms.
4. **Resource allocation:** More women help desks, cyber cells, and patrol units can be placed where risk is high.
5. **Policy evaluation:** Statistical comparison before and after awareness campaigns can measure policy effectiveness.
6. **Under-reporting estimation:** Survey data can estimate the gap between actual victimisation and registered cases.
7. **Justice monitoring:** Data on investigation pendency, charge-sheeting, trial delay, and conviction can improve accountability.

9. Policy Recommendations

First, Bihar should develop a district-level women’s safety statistical dashboard including police complaints, cyber complaints, helpline calls, domestic violence reports, and pending investigations.

Second, schools and colleges should conduct regular awareness programmes on cyber safety, stalking, workplace harassment, and legal reporting. Third, every district should strengthen women help desks, one-stop support services, and cyber complaint assistance. India's women safety framework includes initiatives such as the Women Helpline 181, Nirbhaya Fund, and other legal measures for women's safety and security.

Fourth, statistical monitoring should include rural areas because the analysis shows lower awareness and lower reporting confidence among rural respondents. Fifth, social stigma should be treated as a measurable barrier in crime prevention programmes. Awareness campaigns should not only tell women where to report, but also address family silence, victim blaming, and informal pressure to compromise.

10. Conclusion

The study concludes that statistics are essential for understanding, preventing, and responding to women's harassment and crime in Bihar. Official statistics help identify registered crime patterns, while survey-based statistics reveal hidden victimisation and reporting barriers. The official NCRB-linked data on cyber crimes and kidnapping for marriage show that certain categories require close statistical monitoring. The simulated results further suggest that education, legal awareness, family support, police responsiveness, rural residence, and stigma influence women's reporting behaviour.

Therefore, statistics should be used not only for annual crime records but also for preventive governance. A reliable statistical system can help police, policymakers, educational institutions, women's organisations, and local communities to design targeted interventions. Women's safety in Bihar requires both strong legal enforcement and evidence-based social planning.

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