Emergency department visits and helpline calls in Rhode Island for acute sexual assault before and during the COVID-19 pandemic

On March 9, 2020, the governor of Rhode Island (RI) declared a state of emergency due to the emerging coronavirus disease 2019 (COVID-19) pandemic. Hospitals across the country saw a 42% decrease in both emergency department (ED) visits and admissions for reasons unrelated to COVID-19 during the first months of the pandemic.1,2 Little has been reported about the impact of COVID-19 on sexual assault survivors’ access to and presentation for emergency care. Research from the Ottawa Hospital in Canada found a 56% weekly decrease in patients seeking care through their Sexual Assault and Domestic Violence Program since the start of the COVID-19 pandemic in March 2020, and a 32% reduction in ED visits for sexual assault and domestic violence.3 The Rape, Abuse, and Incest National Network (RAINN) reported a 22% increase in calls from children to their sexual assault hotline from March 1–31, 2020, 79% of whom were living with their perpetrator.4

The aims of this study were to (1) compare the number of calls to the Rhode Island Victims of Crime helpline for sexual assault before the COVID-19 pandemic and during the first 3 months of the COVID-19 pandemic, and (2) compare the number of ED visits for sexual assault at a subset of the largest Rhode Island hospitals before the COVID-19 pandemic and during the first 3 months of the COVID-19 pandemic. We hypothesized that helpline calls for sexual assault would be increased and ED visits for sexual assault would be decreased during the first 3 months of the pandemic.

Data from the Rhode Island Victims of Crime helpline on acute sexual assault calls was collected during the following time periods: March 1, 2018–May 31, 2018; March 1, 2019–May 31, 2019, and March 1, 2020–May 31, 2020. The 2018 and 2019 time periods represent pre-COVID-19 pandemic, and the 2020 time period represents the COVID-19 pandemic. Two pre-pandemic time periods were included to decrease the chance of a single year trend in helpline calls or ED visits. Only calls for sexual assault from the Rhode Island Victims of Crime helpline were included.

We conducted a retrospective chart review of all patients presenting to the EDs for care after sexual assault in five RI hospitals that see the majority of the patients reporting sexual assault in the state during: March 1, 2018–May 31, 2018; March 1, 2019–May 31, 2019, and March 1, 2020–May 31, 2020. We identified charts for detailed review using ICD-10 codes specific for sexual assault. Demographics were collected including patient age, gender, race, ethnicity, primary language, employment status, time of presentation to ED after assault (0–24 hours, 24–96 hours, 96+ hours), single vs multiple assailants, and known versus unknown assailant(s).

This study was approved by the Lifespan and Care New England Institutional Review Boards (IRBs) and informed consent was waived. Table 1 shows characteristics of callers to the RI victims of crime helpline and survivors presenting to the ED before and during the COVID-19 pandemic. There was a 54% reduction in ED presentations for sexual assault from 2018 to 2020 and a 58% reduction from 2019 to 2020 (Table 1). While ED visits for sexual assault decreased during the COVID-19 pandemic, calls to the RI victims of crime helpline for sexual assault increased. There was a 114% increase in calls from 2018 to 2020, and a 91% increase from 2019 to 2020 (Table 1).

The population of both helpline callers and survivors presenting to the ED was predominantly female and English speaking. The majority of survivors presenting to the ED identified as white, both before the pandemic (68%) and during the pandemic (88%). A greater percentage of assailants were known to the survivor during the pandemic (73%), compared to pre-pandemic (39% in 2018, 52% in 2019). In all time periods, the majority of survivors presented to the ED within 24 h of their assault.

To make it less likely that our findings were due to chance, we assessed two separate pre-COVID-19 time periods across the same 3 months in 2018 and 2019. The data from the two pre-COVID-19 time periods for both ED visits and helpline calls were found to be similar, and while only descriptive statistics were used, the pre-pandemic time periods were notably different from the COVID-19 time period as previously described.

With ED visits decreasing across the country at the start of the COVID-19 pandemic, it is not surprising that ED visits for sexual assault decreased across RI hospitals. However, the decrease in ED visits coupled with a significant increase in calls for sexual assault to the RI victims of crime helpline makes it likely that sexual assault itself did not decrease, but that fewer survivors sought care in the ED. There are several possible explanations for this. The RI stay-at-home order meant that those already vulnerable to sexual assault by an intimate partner were now isolated with that perpetrator. This could lead not only to increased rates of sexual assault by an intimate partner, which was a trend illustrated by our data, but also to increased challenges in leaving the home to seek medical care.

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Table 1

| Time Period | ED Visits | Helpline Calls |
|-------------|-----------|---------------|
| 2018        |           |               |
| 2019        |           |               |
| 2020        |           |               |

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| Table 1 | Demographics and characteristics of callers to the RI Victims of Crime Helpline for sexual assault and sexual assault survivors presenting to five RI EDs |
|-----------------|---------------------------------|-----------------|-----------------|
| **RI Victims of Crime Helpline** | | | |
| Total calls to the RI victims of crime helpline for sexual assault | 51 | 57 | 109 |
| **Language** | | | |
| English | 50 (98%) | 51 (89%) | 106 (97%) |
| Spanish | 1 (2%) | 6 (11%) | 3 (3%) |
| **Gender** | | | |
| Male | 5 (10%) | 5 (9%) | 13 (12%) |
| Female | 46 (90%) | 50 (88%) | 93 (85%) |
| Transgender | 0 (0%) | 2 (4%) | 3 (3%) |
| **Known/unknown assailant** | | | |
| Known | 50 (98%) | 55 (96%) | 107 (98%) |
| Unknown | 1 (2%) | 2 (4%) | 2 (2%) |
| **Single or multiple assailant(s)** | | | |
| Single | 48 (94%) | 56 (98%) | 109 (100%) |
| Multiple | 3 (6%) | 1 (2%) | 0 (0%) |
| **RI EDs** | | | |
| Total RI ED visits for sexual assault | 57 | 62 | 26 |
| Age (mean [SD]) | 30 (14) | 27 (12) | 30 (11) |
| **Gender** | | | |
| Male | 5 (9%) | 4 (6%) | 2 (8%) |
| Female | 52 (91%) | 58 (94%) | 24 (92%) |
| **Language** | | | |
| English | 48 (84%) | 58 (94%) | 23 (88%) |
| Spanish | 6 (11%) | 3 (5%) | 2 (8%) |
| Portuguese | 1 (2%) | 0 (0%) | 1 (4%) |
| Unknown | 2 (4%) | 1 (2%) | 0 (0%) |
| **Race** | | | |
| White | 39 (68%) | 42 (68%) | 23 (88%) |
| Black or African American | 8 (14%) | 2 (3%) | 1 (4%) |
| Asian | 1 (2%) | 3 (5%) | 0 (0%) |
| Other | 9 (16%) | 14 (23%) | 2 (8%) |
| Unspecified | 0 (0%) | 1 (2%) | 0 (0%) |
| **Ethnicity** | | | |
| Not Hispanic or Latino | 47 (82%) | 43 (69%) | 19 (73%) |
| Hispanic or Latino | 8 (14%) | 16 (26%) | 7 (27%) |
| Other | 2 (4%) | 3 (5%) | 0 (0%) |
| **Time to presentation after assault** | | | |
| 0–24 h | 23 (40%) | 35 (56%) | 15 (58%) |
| 25–96 h | 15 (26%) | 17 (27%) | 6 (23%) |
| 96+ h | 11 (19%) | 4 (6%) | 2 (8%) |
| Unclear/unspecific | 8 (14%) | 6 (10%) | 3 (12%) |
| **Known/unknown assailant** | | | |
| Known | 22 (39%) | 32 (52%) | 19 (73%) |
| Unknown | 19 (33%) | 17 (27%) | 1 (4%) |
| Unclear/unspecific | 16 (28%) | 13 (21%) | 6 (23%) |
| **Single or multiple assailant(s)** | | | |
| Single | 38 (67%) | 46 (74%) | 17 (65%) |
| Multiple | 6 (11%) | 4 (6%) | 4 (15%) |
| Unclear/unspecific | 13 (23%) | 12 (19%) | 5 (19%) |
Another explanation for decreased ED visits is the fear of visiting a hospital during a pandemic. This was particularly true in the first few months of the pandemic during our study period, when less was known about COVID-19 transmission and mask efficacy, when personal protective equipment was less widely available, and prior to the development of a vaccine. The Centers for Disease Control and Prevention (CDC) reported that 41% of U.S. adults delayed seeking some form of medical care in the first 3 months of the COVID-19 pandemic with rates higher among patients with multiple comorbidities, disabilities, and patients identifying as Black or Hispanic. With regard to survivor demographics in our study, such as age, gender, language, race, and ethnicity, our sample sizes were too small to make statistical inferences; however, we did not observe differences in these demographics between survivors in the pre-COVID-19 and COVID-19 time periods.

Several limitations existed in our study. We relied on retrospective chart review to gather data that is subject to missing data. We also exclusively looked at ED visits and did not take into account visits to urgent care or other medical professionals for sexual assault, which may have been more prevalent during the COVID-19 pandemic due to fear of going to the ED specifically. We did not compare ED visit for sexual assault with overall ED visits for other reasons during the study time periods, but we assume the numbers would be decreased during the COVID-19 pandemic as they were nationally. Similarly, we did not gather data on helpline calls for reasons other than sexual assault during our study time periods, such as domestic violence or other violent crimes.

With increased calls to the RI victims of crime helpline for sexual assault and decreased ED visits during the first months of the COVID-19 pandemic, it follows that fewer survivors were able to access medical care following sexual assault. This has implications for the medical and psychological care of sexual assault survivors, for example, the ability to receive prophylactic medication for sexually transmitted infections including human immunodeficiency virus (HIV), assessment and treatment for injuries, and Sexual Assault Evidence Collection Kits for potential use in legal proceedings. In the future, it will be important to assess ongoing trends of helpline calls and ED visits for sexual assault beyond the first 3 months of the COVID-19 pandemic, with a particular focus on key dates of the pandemic, such as community stay-at-home orders, vaccine availability, and rates of community disease transmission. It is critical that, moving forward, we find innovative ways to reach and support survivors during unprecedented times such as the COVID-19 pandemic. It is also important to continue to monitor trends in care access and reporting, particularly as the COVID-19 pandemic continues.

KEYWORDS
COVID-19, sexual assault, sexual violence

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CONFLICT OF INTEREST
K.L. reports no conflict of interest. E.H. reports no conflict of interest.

AUTHOR CONTRIBUTIONS
K.L. and E.H. contributed to the study concept and design, acquisition of data, and analysis and interpretation of data. K.L. wrote the first manuscript, and E.H. revised the manuscript.

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