

Prevalence, Spectrum, and Outcome of Deliberate Self-harm Presenting to Emergency Department during COVID-19 Pandemic of 2020

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ABSTRACT

Background: The coronavirus disease-2019 (COVID-19) pandemic, and the lockdown imposed, has had profound social and economic consequences and thereby implications on psychological health. This study aims to understand the effects of the pandemic and the lockdown on the prevalence, spectrum, and outcome of patients presenting with deliberate self-harm (DSH) to the emergency department (ED).

Materials and methods: This was a retrospective, observational study done in the ED of a tertiary care hospital in South India on DSH victims presenting from January to August 2020, spanning the prelockdown, lockdown, and unlock phases of the pandemic, and compared with data from a similar period in 2018.

Results: Our study population included 507 DSH victims (prevalence: 1.2%) from January to August 2020. The percentage of DSH cases showed a slight increase among the prelockdown (203/17,234: 1.18%), the lockdown (179/14,687: 1.22%), and the unlock phases (125/9,977: 1.25%). There was a female preponderance (286/507: 56.4%), and the mean age was 33.2 years. Of the 507 patients, 369 (72.8%) were admitted and 19 (3.7%) died. The lockdown period in 2020 showed a 40.9% absolute decrease in the number of DSH victims presenting to the ED as compared to an equivalent period in 2018. The proportion of patients taking plant poisons was significantly lower [odds ratio (OR) 0.38, 95% confidence intervals (CI) 0.18–0.81, $p = 0.012$] and that of corrosive ingestion was significantly higher (OR 2.94, 95% CI 1.57–5.48, $p = 0.001$) in the lockdown phase as compared to a lockdown-control phase of 2018.

Conclusion: There was a reduction in the absolute number of patients presenting with DSH to the ED during January–August 2020, and more so during the lockdown phase (March 24–June 30), as compared to a similar period in 2018. There was no significant difference in the hospital outcome of DSH patients between the two periods.

Keywords: COVID-19, Deliberate self-harm, Lockdown, Pandemic, Poisoning.

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INTRODUCTION

The world witnessed a rampant spread of coronavirus disease-2019 (COVID-19) to every country of the world during 2020. This outbreak is likely to have started from a zoonotic transmission event associated with a large seafood market that traded in live wild animals in Wuhan city, China.^{1,2} The pandemic has had its effect on multiple aspects of human life, be it social, economic, or health-related. With over 109 million cases and counting, the pandemic has not only caused a significant increase in morbidity and mortality by itself but has also affected the quality of life globally.³

From March 24, 2020, the Indian government imposed multiple phases of lockdown (phase 1, 2, 3, and 4), each featuring its own set of restrictions and relaxations.^{4,5} Limitations in travel, mass gatherings, and closure of liquor shops were among the many restrictions imposed at the beginning of the lockdown.^{6,7} The lockdown was extended till the end of May 2020; however, restrictions were maintained until the end of June.^{8,9} There was a sequential relaxation of the restriction over the next 2 months (unlock phase).¹⁰

The COVID-19 pandemic is an unabating crisis to humankind. While the direct financial burden and mortality are calculable and have been documented, its far greater psychological impact has been overlooked.^{11–13} Due to its high risk of infection and mortality, it has caused widespread anxiety among the public. Unemployment, financial instability, self-isolation, and/or the lack of personal space compounded by inadequate healthcare planning and infrastructure

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have precipitated a mental health crisis among the general population. Many cases, both new and old, of mental-health-related issues have arisen. Preexisting cases of depression, anxiety, and stress have only added to an increase in cases of deliberate self-harm (DSH) in vulnerable individuals.^{14,15} While various countries and organizations have identified and taken steps to combat this issue, there is still an increasing trend in these cases.¹⁶ Therefore, we aimed to compare the prevalence, spectrum, and outcome of DSH victims presenting to the emergency department (ED) during the prelockdown, lockdown, and unlock phases and compare this with a similar period in 2018.

MATERIALS AND METHODS

Study Design

This was a single-center, retrospective, observational study.

Study Setting

The study was conducted in the ED of a large tertiary care hospital in the state of Tamil Nadu, South India.

Study Period

The study period was from January 1 to August 31, 2020, and March 24–June 30, 2018. The study months in 2020 were divided into three phases namely prelockdown (January 1–March 23, 2020), lockdown (March 24–June 30, 2020), and unlock phases (July 1–August 31, 2020). Data from March 24 to June 30, 2018, were taken as the lockdown-control phase.

AIMS AND OBJECTIVES

Our study aimed to describe the changing spectrum of DSH patients presenting to our ED during the COVID-19 pandemic in 2020. The objectives of the study were to describe and compare the prevalence of DSH among various demographic groups, various modes and reasons for DSH, and various resuscitation procedures done in the ED (invasive mechanical ventilation/gastric lavage/activated charcoal) among the various phases of the lockdown. We also noted the ED and hospital outcomes in terms of admission rates, mortality, and discharge against medical advice. Also, we compared the data from the lockdown period with an equivalent period of the same duration (99 days) in the year 2018.

Inclusion Criteria

All patients presenting with various modes of DSH to our ED during the above-mentioned time periods were included in the study.

Exclusion Criteria

Patients who were brought dead to the ED were excluded from our study.

Variables

Patients' data were collected from the hospital's electronic health records. The following details were entered in a standardized proforma—baseline demographic characteristics (age and sex), mode, and motive of DSH, history of alcohol consumption before

inflicting self-harm, history of psychiatric illness or DSH in the past, vital signs at presentation to ED along with triage priority, resuscitation in ED, and outcomes.

Outcome Variable

The outcome measures assessed were the monthly prevalence, modes of DSH with individual subcategories, resuscitation in ED, and outcomes.

Bias

Exposure or outcome assessment could not be controlled due to the retrospective nature of the study. Changing requirements for e-pass for inter-district and interstate travel by the government resulted in a referral bias.

Statistical Analysis

Data analysis was done using Statistical Package for Social Sciences for Windows (IBM Corp. Released 2017. IBM SPSS Statistics for Windows, Version 25.0, Armonk, New York). Continuous variables were expressed as mean with standard deviation and nominal variables as numbers and percentages. Dichotomous variables were compared by using Chi-square tests. The factors associated with the profile of DSH victims in the lockdown phase of 2020 as compared to an equivalent phase in 2018 were determined by bivariate logistic regression analysis and their 95% confidence intervals (CI) calculated. A two-sided *p*-value of less than 0.05 was considered statistically significant.

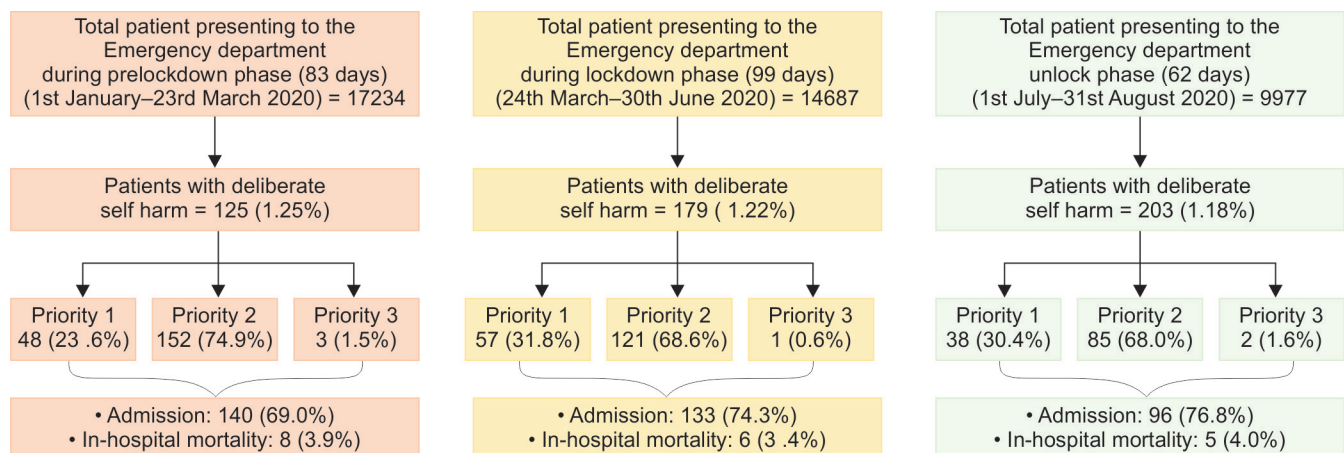
Ethical Considerations

This study was done after approval from the Institutional Review Board and Ethics committee (IRB minute number 13322 dated August 26, 2020). We used unique identifiers and password-protected data entry software to maintain patient confidentiality.

RESULTS

The ED received a total of 17,234 patients in the prelockdown phase (January 1–March 23, 2020), 14,687 in the lockdown phase (March 24–June 30, 2020), and 9,977 in the unlock phase (July 1–August 31, 2020). Our study population included a total of 507 DSH victims. The prevalence of DSH was 1.18% (203/17,234) in the prelockdown phase, 1.22% (179/14,687) in the lockdown phase, and 1.27% (125/9,977) in the unlock phase (Flowchart 1). There was a decrease

Flowchart 1: STROBE diagram



in the absolute number of patients presenting to the ED during the lockdown phase of the pandemic. With this, there was an absolute decrease in the number of patients presenting with DSH (Fig. 1).

On comparing the DSH cases during the lockdown period with a control matched arm of March 24–June 30, 2018 (303 DSH cases), we noted an absolute decrease of 124 (40.9%) victims. There were no significant differences in the age and sex distribution during these periods (Table 1).

Baseline Demographic Characteristics

The mean age (SD) in all the three phases was similar: 33.4 (SD: 12.8) years, 33.5 (SD: 14.0) years, and 32.7 (SD: 13.8) years in the prelockdown, lockdown and unlock phases, respectively. There was a female preponderance (286/507—56.4%) noted among the study population, which remained similar in all three phases of the pandemic. The proportion of pediatric/adolescent (<18 years), adult (18–59 years), and geriatric (≥60 years) patients did not show

much variation among all the phases, with most of them being adults (Table 1).

Motive for DSH

The motive for DSH could be elicited by clinical history only in 42.9, 64.5, and 73.6% of patients, respectively, in the three phases of the lockdown. The motive was determined to be interpersonal issues in a majority of the cases (256/507—50.5%), whereas academic or work-related, financial, or health-related issues were quoted in a small percentage of the cases. There was a slight increase in the percentage of DSH cases attributed to financial and academic reasons in the lockdown and the unlock phases as compared to the prelockdown phase (Table 1).

Mode of DSH

The various modes employed for DSH and their subcategories were compared in the three phases of lockdown (Table 2, Fig. 2).

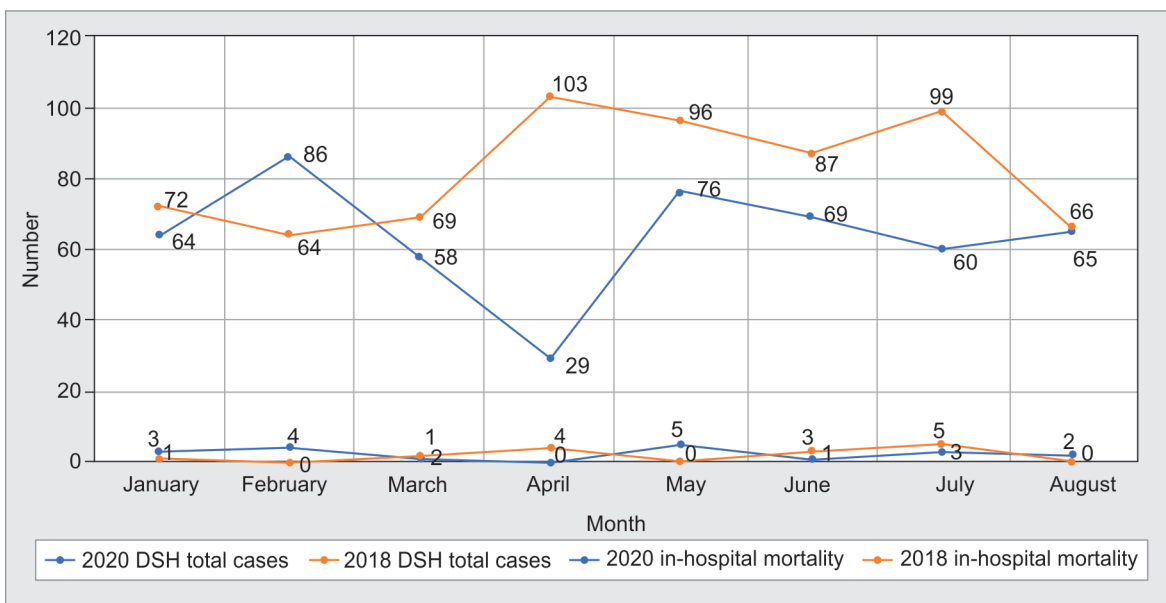


Fig. 1: DSH—total cases and in-hospital mortality by month, January–August, 2018 and 2020

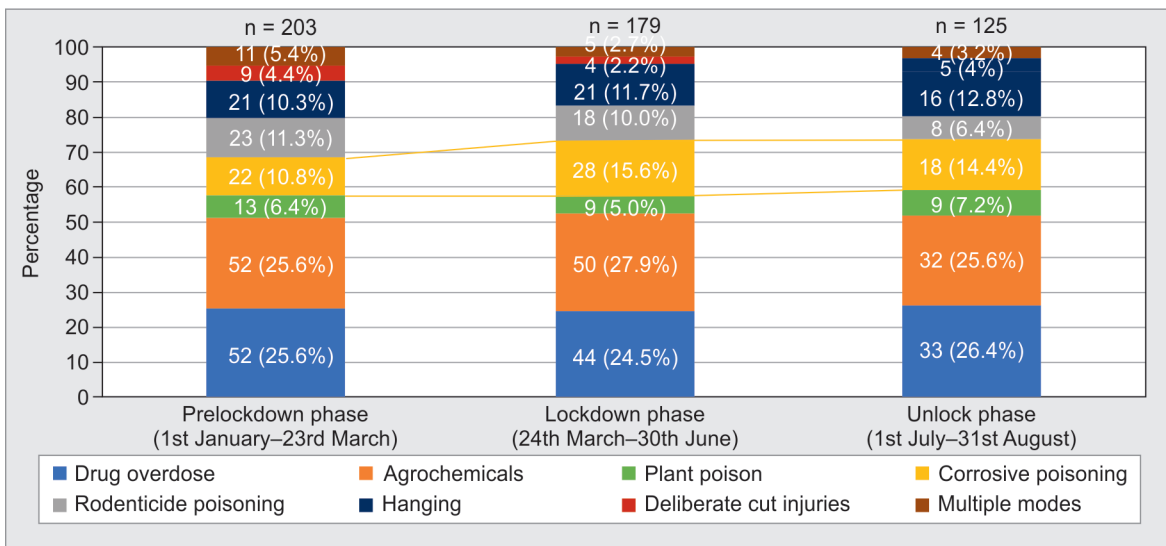


Fig. 2: Different modes of DSH during the three phases of the pandemic

Table 1: Characteristics of deliberate self-harm in various phases of the pandemic (prelockdown, lockdown, and unlock phases) and in the lockdown-control phase

	January 1–March 23, 2020 (83 days) prelockdown phase Frequency (%) n = 203	March 24–June 30, 2020 (99 days) Lockdown phase Frequency (%) n = 179	July 1–August 31, 2020 (62 days) Unlock phase Frequency (%) n = 125	March 24–June 30, 2018 (99 days) Lock-down-control phase Frequency (%) n = 303	Absolute difference* (%)# Lockdown vs Lock-down-control phase n = -124 (-40.9%)
Baseline characteristics					
Mean age ± SD (years)	33.4 ± 12.8	33.5 ± 14.0	32.7 ± 13.8	32.5 ± 13.1	+1.0
Males	91 (44.8)	72 (40.2)	58 (46.4)	142 (46.9)	-70 (-49.3)
Age category					
<18 years (pediatric and adolescent)	7 (3.4)	3 (1.7)	8 (6.4)	7 (2.3)	-4 (-57.1)
18–59 years (adult)	184 (90.6)	162 (90.5)	108 (86.4)	280 (92.4)	-118 (-42.1)
≥60 years (geriatric)	12 (5.9)	14 (7.8)	9 (7.3)	16 (5.3)	-2 (-14.3)
Past history of DSH	11 (5.4)	18 (10.1)	13 (10.4)	19 (6.3)	-1 (-5.3)
Past history of psychiatric disorder	16 (7.9)	14 (7.8)	17 (13.6)	21 (6.9)	-7 (-33.3)
Reason of DSH					
Personal issues	78 (38.4)	104 (58.1)	74 (59.2)	143 (47.2)	-39 (-27.3)
Health-related issues	7 (3.4)	4 (2.2)	10 (8.0)	4 (1.3)	0 (0)
Academic issues	1 (0.5)	3 (1.7)	4 (3.2)	13 (4.3)	-10 (-76.9)
Financial issues	1 (0.5)	8 (4.5)	4 (3.2)	10 (3.3)	-2 (-20.0)
Unknown	116 (57.1)	60 (33.5)	33 (26.4)	133 (43.9)	-73 (-54.9)
Positive history of alcohol consumption prior to incident	19 (9.4)	21 (11.7)	16 (12.8)	43 (14.2)	-22 (-51.2)
Vital signs at presentation					
Tachycardia (heart rate >100/minute)	84 (41.4)	100 (55.9)	53 (42.4)	133 (43.9)	-33 (-24.8)
Systolic BP <100 mm Hg	19 (9.4)	24 (13.4)	14 (11.2)	47 (15.5)	-23 (-48.9)
SpO ₂ ≤94%	23 (11.3)	27 (15.1)	20 (16.0)	46 (15.2)	-19 (-41.3)
Glasgow coma scale <15	48 (23.6)	50 (27.9)	34 (27.2)	57 (18.8)	-7 (-12.3)
Prehospital and emergency management					
Treated at another hospital	121 (59.6)	117 (65.4)	81 (64.8)	200 (66.0)	-83 (-41.5)
Gastric lavage done	78 (38.3)	62 (34.6)	36 (28.8)	163 (53.8)	-101 (-62.0)
Activated charcoal	21 (10.3)	7 (3.9)	7 (5.6)	20 (6.6)	-13 (-65.0)
Invasive mechanical ventilation	39 (19.2)	39 (21.8)	20 (16.0)	55 (18.2)	-16 (-29.1)
Hospital outcome					
Admission	140 (69.0)	133 (74.3)	96 (76.8)	220 (72.6)	-87 (-39.5)
Inhospital mortality	8 (3.9)	6 (3.4)	5 (4.0)	7 (2.3)	-1 (-14.3)
Discharge against medical advice	44 (21.6)	35 (19.6)	19 (15.2)	52 (17.2)	-17 (-32.7)

*Absolute difference = Number in lockdown phase (March 24–June 30, 2020)—Number in lockdown-control phase (March 24–June 30, 2018);

#% = Absolute difference/Number in lockdown-control phase

The most common modes employed included drug overdoses and agrochemical poisoning, followed by rodenticide ingestion, corrosive ingestion, hanging, and plant poison ingestion. Throughout all three phases of the pandemic, the most used drugs include nonsteroidal anti-inflammatory drugs (NSAIDs) (including paracetamol), benzodiazepines, antidepressants, and antipsychotics, and the most common agrochemicals include organophosphates and pyrethroids. In the lockdown phase of 2020, there was a significant increase in the proportion of corrosive ingestions [odds ratio (OR) 2.94, 95% CI 1.57–5.48, $p = 0.001$] and a significant decrease in the proportion of

plant poison intake (OR 0.38, 95% CI 0.18–0.81, $p = 0.012$) as compared to an equivalent period in 2018 (Table 3).

ED Presentation and Interventions

The severity of clinical presentation to ED was determined by the patients' vital signs, and subsequently, their triage priority in ED. There was an increase in the proportion of priority 1 cases in the lockdown phase of 2020 as compared to an equivalent period in 2018, though not statistically significant (OR 1.45, 95% CI 0.98–2.22, $p = 0.065$) (Table 3).

Table 2: Mode of deliberate self-harm in different phases of the pandemic of 2020 and the lockdown-control phase of 2018

Characteristics	January 1–March 23, 2020	March 24–June 30, 2020	July 1–August 31, 2020	March 24–June 30, 2018
	(83 days)	(99 days)	(62 days)	(99 days)
	prelockdown phase Frequency (%) n = 203	Lockdown phase Frequency (%) n = 179	Unlock phase Frequency (%) n = 125	Lockdown-control phase (%) n = 303
Drug overdose	52 (25.6)	44 (24.6)	33 (26.4)	88 (29.0)
Benzodiazepines	8 (15.4)	8 (18.2)	3 (9.1)	19 (21.6)
Nonsteroidal anti-inflammatory drugs (NSAIDs)	10 (19.2)	7 (15.9)	2 (6.1)	8 (9.1)
Antidepressants	8 (15.4)	4 (9.1)	6 (18.2)	5 (5.7)
Antipsychotics	7 (13.5)	5 (11.4)	4 (12.1)	6 (6.8)
Unknown or multiple tablets	0 (0)	4 (9.10)	3 (9.1)	26 (29.5)
Others*	19 (36.5)	16 (36.4)	15 (45.5)	24 (27.3)
Agrochemicals poisoning	52 (25.6)	50 (27.9)	32 (25.6)	91 (30.0)
Organophosphorus	20 (38.5)	14 (28.0)	10 (31.3)	41 (45.1)
Pyrethroid	14 (26.9)	15 (30.0)	10 (31.3)	22 (24.2)
Carbamates	3 (5.8)	3 (6.0)	0 (0.0)	5 (5.5)
Organophosphorus and pyrethroid	7 (13.5)	11 (22.0)	6 (18.7)	11 (12.1)
Multiple agrochemical compounds or unknown agrochemical	8 (15.3)	7 (14.0)	6 (18.7)	12 (13.2)
Plant poisoning	13 (6.4)	9 (5.0)	9 (7.2)	37 (12.2)
Oleander	7 (58.3)	5 (55.6)	3 (33.3)	21 (56.8)
Oduvanthalai	2 (15.4)	3 (33.3)	5 (55.6)	14 (37.8)
Multiple plant poisons, others [‡] or unknown plant poison	4 (30.8)	1 (11.1)	1 (11.1)	2 (5.4)
Corrosive poisoning	22 (10.8)	28 (15.6)	18 (14.4)	18 (5.9)
Acid	20 (90.9)	22 (78.6)	12 (66.7)	13 (72.2)
Alkali	0 (0)	2 (7.1)	0 (0.0)	2 (11.1)
Suspected corrosive poisoning	2 (9.1)	4 (14.3)	6 (33.3)	3 (16.7)
Rodenticide poisoning	23 (11.3)	18 (10.0)	8 (6.4)	28 (9.2)
Yellow phosphorous	9 (39.1)	15 (83.3)	3 (37.5)	17 (60.7)
Zinc phosphide	6 (26.1)	1 (5.6)	5 (62.5)	5 (17.9)
Aluminum phosphate	3 (13.0)	0 (0)	0 (0.0)	2 (7.1)
Multiple rodenticides or others (coumarins) or unknown rodenticide	5 (21.7)	2 (11.1)	0 (0.0)	4 (14.3)
Hanging	21 (10.3)	21 (11.7)	16 (12.8)	20 (6.6)
Complete	4 (19.0)	7 (33.3)	2 (12.5)	3 (15.0)
Partial	15 (71.4)	10 (47.6)	9 (56.3)	14 (70.0)
Unknown	2 (9.5)	4 (19.0)	5 (31.2)	3 (15.0)
Deliberate cut injuries	9 (4.4)	4 (2.2)	5 (4)	15 (4.9)
Multiple mode of self-harm	11 (5.4)	5 (2.8)	4 (3.2)	6 (2.0)

*Oral hypoglycemic agents, antihistamines, antihypertensives, antithyroid drug, thyroxine; [‡]Strychnine, Datura

The application of emergency interventions, such as gastric lavage, activated charcoal, and endotracheal intubation, and invasive mechanical ventilation (either outside or in our ED) was assessed. There was no significant difference in the number of patients who went to another center before presenting to our ED. Notably, fewer patients were given gastric lavage (34.6 vs 53.8%) and activated charcoal (3.9 vs 6.6%) in the lockdown phase as compared to the lockdown-control phase. This decrease in the application of time-sensitive resuscitation measures could be attributed to a delay in presentation to the hospital because of restricted transport and thereby restricted hospital accessibility.

Slightly more patients required intubation and invasive mechanical ventilation (21.8 vs 18.2%).

Hospital Outcome

After initial emergency resuscitation and stabilization, these patients were referred to the concerned medical or surgical specialties for further management as indicated. The hospital admission rates were similar in all three phases of the pandemic and the lockdown-control phase of 2018. The inhospital mortality rate of DSH victims was comparable during the prelockdown, lockdown, and unlock phases (3.4, 3.9, and 4.0% respectively). This was found

Table 3: Bivariate logistic regression analysis: lockdown phase (2020) vs lockdown-control phase (2018)

	March 24–June 30, 2020 (99 days) Lockdown phase Frequency (%) n = 179	March 24–June 30, 2018 (99 days) Lockdown-control phase Frequency (%) n = 303	Lockdown vs lockdown-control phase Unadjusted odds ratio (95% confidence interval)	p value
Males	72 (40.2)	142 (46.9)	0.76 (0.53–1.11)	0.157
Geriatric (age ≥60 years)	14 (7.8)	16 (5.3)	1.52 (0.72–3.20)	0.267
Triage priority 1	57 (31.8)	73 (24.1)	1.47 (0.98–2.22)	0.065
Modes of DSH				
Drug overdose	44 (24.6)	88 (29.0)	0.80 (0.52–1.21)	0.289
Agrochemical	50 (27.9)	32 (25.6)	0.90 (0.60–1.36)	0.624
Plant poisons	9 (5.0)	37 (12.2)	0.38 (0.18–0.81)	0.012
Corrosive ingestion	28 (15.6)	18 (5.9)	2.94 (1.57–5.48)	0.001
Rodenticide	18 (10.0)	28 (9.2)	1.10 (0.59–2.05)	0.769
Hanging	21 (11.7)	20 (6.6)	1.88 (0.99–3.58)	0.054
Trauma	4 (2.2)	15 (4.9)	0.44 (0.14–1.34)	0.149
Treated at another hospital and referred	117 (65.4)	200 (66.0)	0.97 (0.66–1.43)	0.886
Positive history of alcohol consumption prior to the incident	21 (11.7)	43 (14.2)	0.80 (0.46–1.40)	0.443
Past history of DSH	18 (10.1)	19 (6.3)	1.67 (0.85–3.28)	0.135
Past history of psychiatric disorder	14 (7.8)	21 (6.9)	1.14 (0.56–2.30)	0.716
Invasive mechanical ventilation	39 (21.8)	55 (18.2)	1.26 (0.79–1.99)	0.331
Inpatient admission rate	133 (74.3)	220 (72.6)	1.09 (0.72–1.66)	0.685
Inhospital mortality	6 (3.4)	7 (2.3)	1.47 (0.48–4.43)	0.498

to be slightly higher than in a similar period in 2018 (2.3%), though not statistically significant.

DISCUSSION

In our study, we noted that there was a reduction in the overall number of patients presenting to the ED during the lockdown phase of the pandemic; however, as expected, there was a slight increase in the prevalence of DSH from the prelockdown to the lockdown and to the unlock phases. Prevalence was more common in females throughout the pandemic, which was consistent with previously available literature.^{16–18} The mean age in all three phases of the pandemic was around 33 years, which translates to the breadwinners and the homemakers of the household and is a concerning finding. A study done in Japan showed an increase in suicide mortality in females from July to November 2020 and in males from October to November 2020 belonging to a similar age-group.¹⁹ A report on suicides among 93 COVID-positive or suspect patients done in an Indian population showed a median age of 45 years with 75.3% being males. They found the highest risk to be within the first week of COVID diagnosis confirmation.²⁰ In our study population, the primary reason for DSH continued to be interpersonal issues, which was probably due to stringent lockdown and quarantine which caused a lack of personal space. However, the prevalence of DSH due to social, financial, academic, and health-related issues rose slightly during the lockdown and unlock phases of the pandemic. A study done in India showed reasons such as fear of COVID-19 infection, financial crisis, loneliness, as the main motives for DSH which differed from our study population.²¹

During these phases, DSH was seen more commonly in those with either a past history of DSH or a history of psychiatric disorder.

This could be attributed to an increase in the above-mentioned stressors, which provoked DSH behaviors in these vulnerable groups. Alcohol consumption immediately before the incident as determined by history was also less than in similar data from 2018, which could be secondary to the ban on liquor shops during the pandemic.^{7,22} This decrease in alcohol consumption was perhaps the silver lining of the lockdown due to the COVID-19 pandemic.

A study done at our center in 2011–2013 showed that the prevalence of DSH with drug overdose was higher than in the present study.²³ This could have been due to the difficulty in traveling to access over-the-counter drugs during the stringent lockdown. However, drug overdose and agrochemical poisoning continued to remain the most common modes of DSH. A study on agrochemical poisoning done at our center in 2018 showed organophosphorus poisoning to be the most common of the agrochemicals used for DSH, which was similar to our findings.²⁴ The incidence of hanging and corrosive ingestion showed an increasing trend even during the lockdown phase. This could probably be because of the easy availability of materials, such as ropes and shawls, and corrosives in the household. Hanging was shown to be the most common mode of DSH (53.8%) in a study done among COVID-19-positive and suspected positive patients in India.²⁰

We noted that during the lockdown phase of the pandemic, patients tended to be sicker at presentation, with more patients having tachycardia and altered sensorium than in the lockdown-control phase. This could be attributed to a delay in presentation as a result of restricted transportation facilities during the pandemic.^{25,26} Also, a decrease in patients who received time-sensitive interventions such as gastric lavage and activated charcoal during the lockdown phase was noted as compared to the lockdown-control phase. Also, more patients required invasive mechanical ventilation. Slightly more patients required admission.

There was no difference in the mortality rates across the three phases of the pandemic. However, mortality during the pandemic was higher than the mortality rate as compared to a similar period in 2018, though not found to be statistically significant.

Strengths of our Study

This is one of the first reported articles from a large tertiary care center in India comparing the spectrum of DSH presenting to the ED during the COVID-19 pandemic. Owing to the comparatively large study population, our analysis meaningfully contributes to further understanding the prevalence, spectrum, and outcome of DSH during the lockdown period.

Limitations and Bias

Our study had certain limitations. We were unable to individually predict which lockdown measure had the most significant effect as several measures were implemented and removed by the government at approximately the same time. Secondly, this being a single-center study may not be representative of the entire national profile. Due to the requirement of e-pass for interstate and inter-district travel imposed by the government,²⁷ there was also patient selection bias and referral bias which could not be avoided.

CONCLUSION

Our study showed an overall decrease in the number of patients presenting with DSH to the ED during the lockdown phase of the pandemic as compared to a similar period in 2018. There was a significant increase in the proportion of patients presenting with consumption of commonly available household products like corrosives and a decrease in the proportion of patients with plant poison intake in the lockdown phase of the pandemic as compared to a similar lockdown-control period in 2018. There was no statistically significant difference in the demographic characteristics or hospital outcomes in terms of admission rate or mortality between the two time periods.

Research Quality and Ethics Statement

All authors of this manuscript declare that this scientific study complies with standard reporting guidelines set forth by the EQUATOR Network. The authors ratify that this study required Institutional Review Board/Ethics Committee review, and hence prior approval was obtained (IRB Min. No. 13322 dated August 26, 2020). We also declare that we did not plagiarize the contents of this manuscript and have performed a plagiarism check.

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