



BACKGROUND

- Covid-19 pandemic created disruption and social isolation for children and teenagers when most schools closed down in the spring of 2020 and transitioned to virtual platforms for learning. Many school sports and extracurricular activities were suspended during this time. The consequential social isolation and subsequent emotional toll in school-age children and teens have likely never been higher at any point in US history. There is recent evidence of increased psychiatric admissions during the pandemic period.
- The primary objective was to compare the prevalence of hospital admissions with intentional ingestions in children ≥ 10 years between the pandemic (Mar 2020, to Feb 2021) to the pre-pandemic (Mar 2019, to Feb 2020) periods in a free-standing children's hospital. The secondary objective was to describe and compare the demographic and clinical characteristics of hospitalized teens with intentional ingestions.

DESIGN/METHODS

- After IRB approval, we have filtered the hospital administrative database with ICD-10 codes for intentional ingestion. All children (≥ 10 years) who were hospitalized (inpatient or observation status) with intentional ingestion during the study periods were included in the study.
- Patient charts were reviewed for demographic data, hospital course, and outcomes. The prevalence of intentional ingestion was calculated per 100 total admissions (all ages) during each period. Chi-square test and student t-test were used to compare the demographic characteristics and outcome variables between the two periods.

RESULTS

- During the pandemic period, among 14,405, there were 143 (0.99%) cases of intentional ingestions compared to 101 cases out of a total of 15,885 admissions (0.64%) during the pre-pandemic period (OR: 1.57; 95% CI: 1.17-1.97).
- The most common medications ingested were analgesics followed by antidepressants.
- A majority (87.7%) had a prior psychiatric diagnosis and 84% were committed to temporary mental health treatment (Florida Baker Act).
- Demographic, clinical, and psychiatric diagnoses were not significantly different between the two periods (Table 1).
- A significantly higher number of children were transferred to a psychiatric ward during the pandemic period (OR: 4.6; 95% CI: 1.2-17.3).

	Pandemic	Pre-pandemic	Significance
Female (%)	76.9	70.3	0.316
Hispanic (%)	66.4	67.0	0.926
White race (%)	87.4	83.2	0.453
Age (mean (SD)) years	15.0 (1.7)	15.3 (1.6)	0.09*
Living with both parents (%)	48.3	48.5	0.986
Zip code MHI			
Top two income quartiles (%)	47.5	39.4	0.212
Recent immigration (%)	5.6	4.0	0.766#
School issues (%)	59.6	70.5	0.170
Previous admission (%)	43.4	37.6	0.370
Antidote (%)	23.8	28.7	0.385
Baker Act (%)	84.6	83.2	0.761
Suicidal (%)	54.2	48.5	0.380
Any psychiatric diagnosis (%)	88.0	88.1	0.983
PICU Admission (%)	56.6	63.4	0.292
Psychiatry admission (%)	97.9	91.1	4.6 (1.2-17.3)**
Length of stay (mean (SD)) days	2.17 (2.0)	2.24 (2.3)	0.808*

MHI = median household income; *Student t-test; #Fisher's exact test; **Odds ratio (95% CI).

Table 1. Demographic and clinical characteristics and outcomes of children admitted with intentional ingestions during and pre-COVID-19 pandemic periods.

CONCLUSION

- There is an increase in hospitalization of adolescents with intentional ingestions during the COVID-19 pandemic period.
- Social isolation probably is the most likely reason for such an increase.
- Opportunities to improve social connectivity and decrease school closures should be explored for future pandemic events.

