



Trends of visits due to suicide attempts during the COVID-19 Pandemic in a university teaching hospital in Sao Paulo, Brazil.

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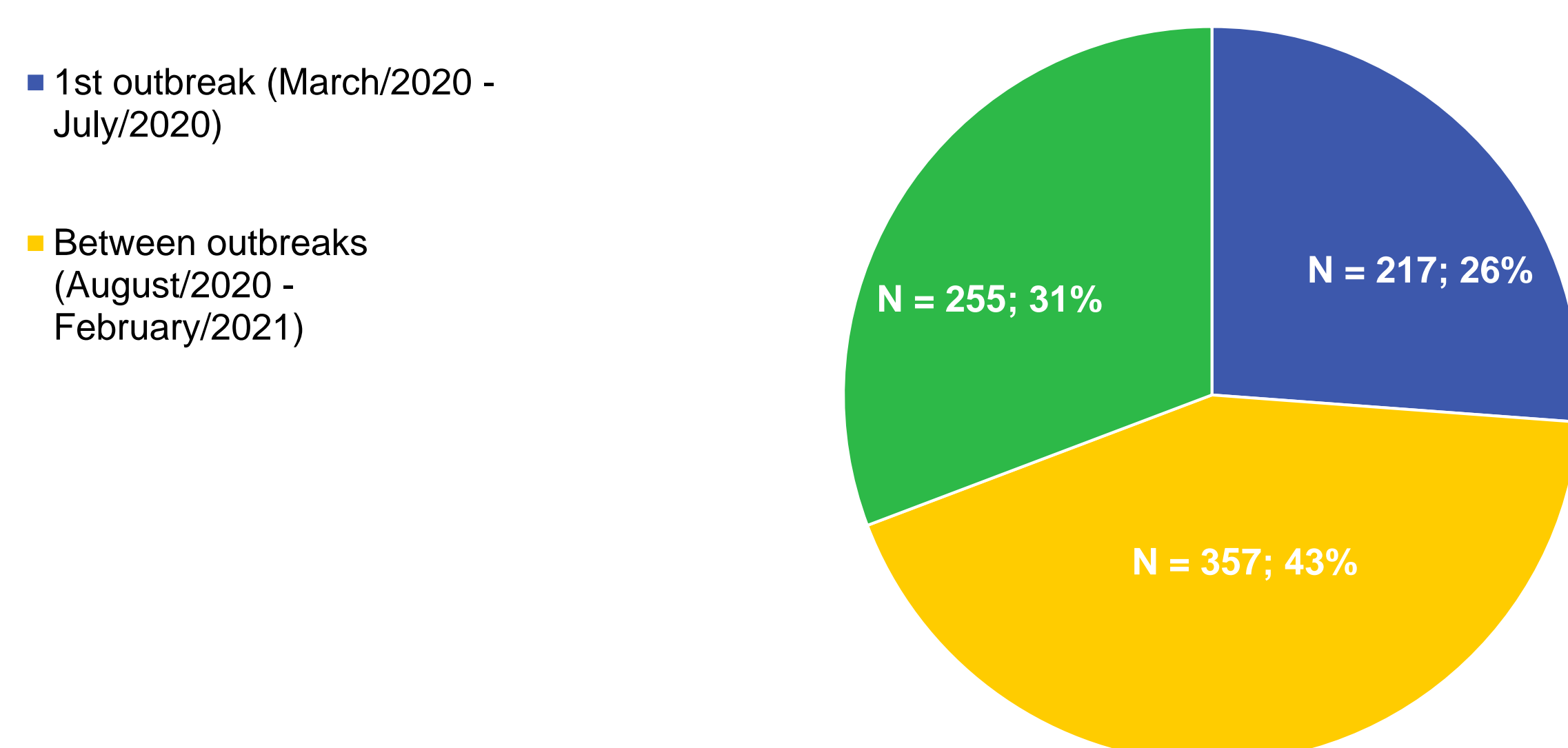
BACKGROUND:

✓ The COVID-19 pandemic is possibly generating substantial increases in the global burden of psychiatric disorders, some of them correlated with suicide attempt (SA)¹. A substantial part of psychiatric referrals in a General Hospital comes from SA². In Brazil, the first outbreak (FO) of infections occurred from March to July/2020, and the period from August/2020 to February/2021 was detected a slight decline of infections and social isolation restrictions, called between outbreaks (BO) period; and from March to July/2021, a second outbreak (SO) occurred.

OBJECTIVE:

✓ This study primary aims to examine the clinical characteristics for SA in a university hospital during the COVID-19 pandemic in Sao Paulo/ Brazil. The secondaries aims include to understand the influence of the pandemic in SA and analyse mental health diagnostic related to suicide attempt.

GRAPH 1 - Number of patientes reffered and evaluated by an ER CoCarePsy service at a university hospital in Sao Paulo Brazil during the COVID-19 pandemic periods



METHODS:

✓ Design and setting:

• A cross-sectional study in an emergency department (ED) from the general hospital at Federal University of Sao Paulo/Brazil.

✓ Sample and procedure:

• A total of 1072 patients referred to the Psychiatric Disorders Service (CoCarePsy) from 03/11/2020 to 07/31/2021. Of those, 243 were not evaluated (dropout, discharge or transfer), regularly distributed over the 17 months of the study (p = 0.06). The analysed sample is N = 829.

• The CoCarePsy receives requests from the emergency departments (Internal Medicine, Emergency Room, and other specialties), and monitors the request coming from the institution's psychiatric emergency, which is located in another university building.

✓ Instruments:

• Patient chart and registering notes.

✓ Statistical analysis:

• The chi-square test and T-student test were duly applied for this data.

RESULTS:

✓ Graph 1 shows total of evaluated patients, distributed by the 3 pandemic periods.

✓ From the 829 sample, 157 (18.9%) patients attempted suicide (PAS). Graph 2 shows the distribution during the period (chi-square = 18.104; df = 2; p<0.001) .

✓ Table 1 discuss the gender distribution between PAS. Over the study period, the average of men who attempted suicide was similar to women (19.8% vs. 18.2%; p> 0.05). Comparing the BO and the SO there was a gender reversal in suicide, with men decreasing and women increasing, progressively (p <0.001 – light green). On the distribution by gender, it is also observed that, as women, it rates an increase in the percentage of suicide attempt from the phase BO to SO (p <0.001 – light blue). The other associations by trial or by gender were not statistically relevant.

TABLE 1 - Distribution of the patient gender who attempted suicide during the COVID-19 pandemic periods at a university hospital in São Paulo, Brazil					
PANDEMIC PERIODS				GENDER	
				Male	Female
1st outbreak	PATIENTS WHO ATTEMPTED SUICIDE	No	Count	97	91
			% within PAS	51.6%	48.4%
			% within GENDER	86.6%	86.7%
		Yes	Count	15	14
			% within PAS	51.7%	48.3%
			% within GENDER	13.4%	13.3%
Between outbreaks period	PATIENTS WHO ATTEMPTED SUICIDE	No	Count	138	161
			% within PAS	46.2%	53.8%
			% within GENDER	79.8%	87.5%
		Yes	Count	35	23
			% within PAS	60.3%	39.7%
			% within GENDER	20.2%	12.5%
2nd outbreak	PATIENTS WHO ATTEMPTED SUICIDE	No	Count	73	112
			% within PAS	39.5%	60.5%
			% within GENDER	73.7%	71.8%
		Yes	Count	26	44
			% within PAS	37.1%	62.9%
			% within GENDER	26.3%	28.2%

✓ Regarding age, the mean age of patients who tried suicide (mean = 35; SD = 15 years old) and those who did not try (mean = 45; SD = 19 years old) were similar in the 3 periods (p>0.05) . It is noteworthy that no patient who attempted suicide had COVID-19 and that 88% of suicide attempts were related, in the patient chart, to the ICD 10th diagnoses X60-X88 and Y10-Y34.

✓ Table 2 shows the distribution of psychiatric diagnosis of PAS. Most attempts were within humor and anxiety disorders. The increase in attempts among groups with anxiety/stress-related disorders (F40 to F48) can be explained by the psychological distress related to the SARS-CoV2 pandemic and quarantine restrictions – a systematic review demonstrating that the prevalence of anxiety symptoms ranged from 6.33 to 50.9% and of psychological distress ranged from 34.43 to 38%³.

GRAPH 2 - Distribution of the patients who attempted suicide in different COVID-19 pandemic periods in a university hospital at São Paulo, Brazil

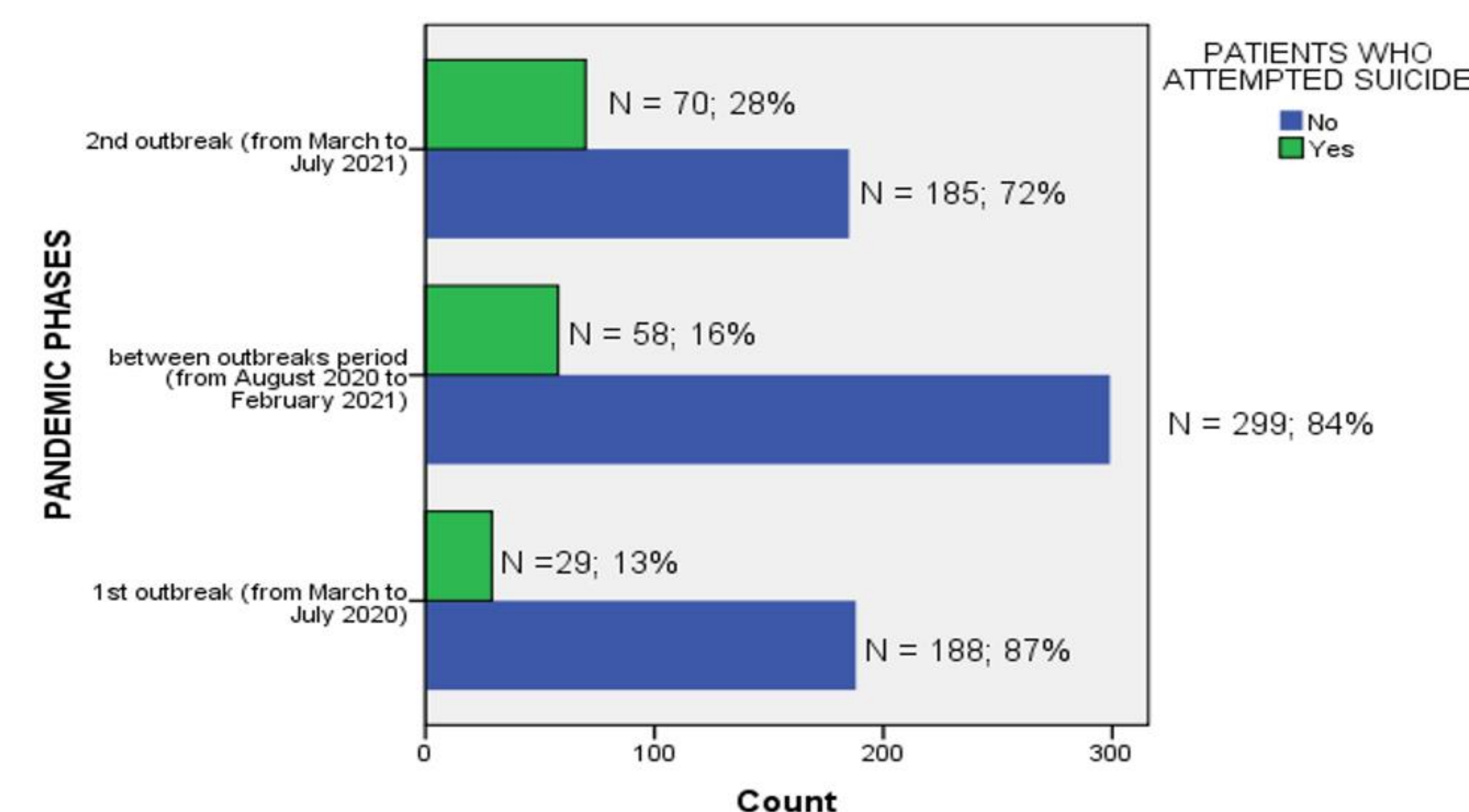


TABLE 2 - Percentual of ICD 10th psychiatric diagnosis of patients who attempted suicide according the COVID-19 pandemic periods

ICD-10 PSYCHIATRIC DIAGNOSES	1st outbreak		Between outbreaks period		2nd outbreak	
	N	% Dx	N	% Dx	N	% Dx
F00 A F09	0	0	0	0	0	0
F10 to F19	4	22%	11	46%	8	40%
F20 to F29	1	3%	2	3%	2	10%
F30, F31, F34 to F39	0	0	6	17%	5	39%
F32 and F33	15	44%	24	41%	29	54%
F40 to F48	1	5%	1	3%	4	16%
F60 to F69	7	70%	13	57%	16	64%

DISCUSSION:

✓ Although no clinical differences have been identified in the pandemic periods, it is noteworthy how social restrictions and quarantine imposed during the first 5 months of the pandemic reduced the number of PAS in the ED or increased the number of patients who sought help throughout the year.

CONCLUSION:

✓ We are still far from understanding the impact that the pandemic causes in several aspects, such as suicide, but it is important to be aware of these changes in the medical context to develop more forceful actions.

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