

COVID-19: time from symptom onset until death in UK hospitalised patients

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Aim

In patients admitted to hospital with COVID-19, what is the time from symptom onset to death? Does this differ by age, sex, and first/second wave?

Methods and Results

Patients were prospectively enrolled into the ISARIC-CCP-UK study (n = 76707).

In those in whom symptom onset date was unknown, hospital admission date was used (7802 [9.8%]). In analyses of time from hospital admission to death, patients with symptoms occurring in hospital were excluded. These patients are included in analyses of time from symptom onset to death.

Data were stratified by hospital admission date of 1st August 2020.

Median (interquartile range) of time from symptom onset to death is currently shorter in the second wave (7 days [IQR 11 days]) compared to the first wave (13 days [IQR 14 days]). However, it should be noted that insufficient time has elapsed since 1st August 2020 to provide sufficient follow-up for this and second-wave records are more incomplete. Little difference is seen in time from hospital admission to death between first and second waves.

Table 1: Symptom onset to death in hospitalised patients with COVID-19. Median (interquartile range) days.

		Before 1st August 2020	After 1st August 2020
Age (years)	<18	6.0 (8.0)	2.0 (4.0)
	18-39	10.0 (11.0)	4.0 (8.0)
	40-49	13.0 (12.0)	8.0 (11.0)
	50-59	15.0 (14.0)	8.0 (11.0)
	60-69	15.0 (15.0)	7.0 (10.0)
	70-79	14.0 (15.0)	8.0 (12.0)
	80-89	13.0 (15.0)	7.0 (12.0)
	90+	12.0 (14.0)	7.0 (14.0)
	Sex at Birth	Male	14.0 (14.0)
Female		13.0 (14.0)	6.0 (11.0)

Table 2: Hospital admission to death in hospitalised patients with COVID-19. Median (interquartile range) days.

		Before 1st August 2020	After 1st August 2020
Age (years)	<18	2.0 (12.0)	2.0 (6.0)
	18-39	3.0 (24.0)	2.0 (4.0)
	40-49	3.0 (25.0)	2.0 (5.0)
	50-59	3.0 (26.0)	2.0 (4.0)
	60-69	3.0 (25.0)	2.0 (4.0)
	70-79	3.0 (26.0)	2.0 (4.0)
	80-89	4.0 (28.0)	2.0 (5.0)
	90+	3.0 (26.0)	2.0 (9.0)
Sex at Birth	Male	3.0 (26.0)	2.0 (4.0)
	Female	3.0 (26.0)	2.0 (4.0)

Conclusion

No strong evidence is found for a difference in time from symptom onset to death or time from admission to death between the first and second wave.

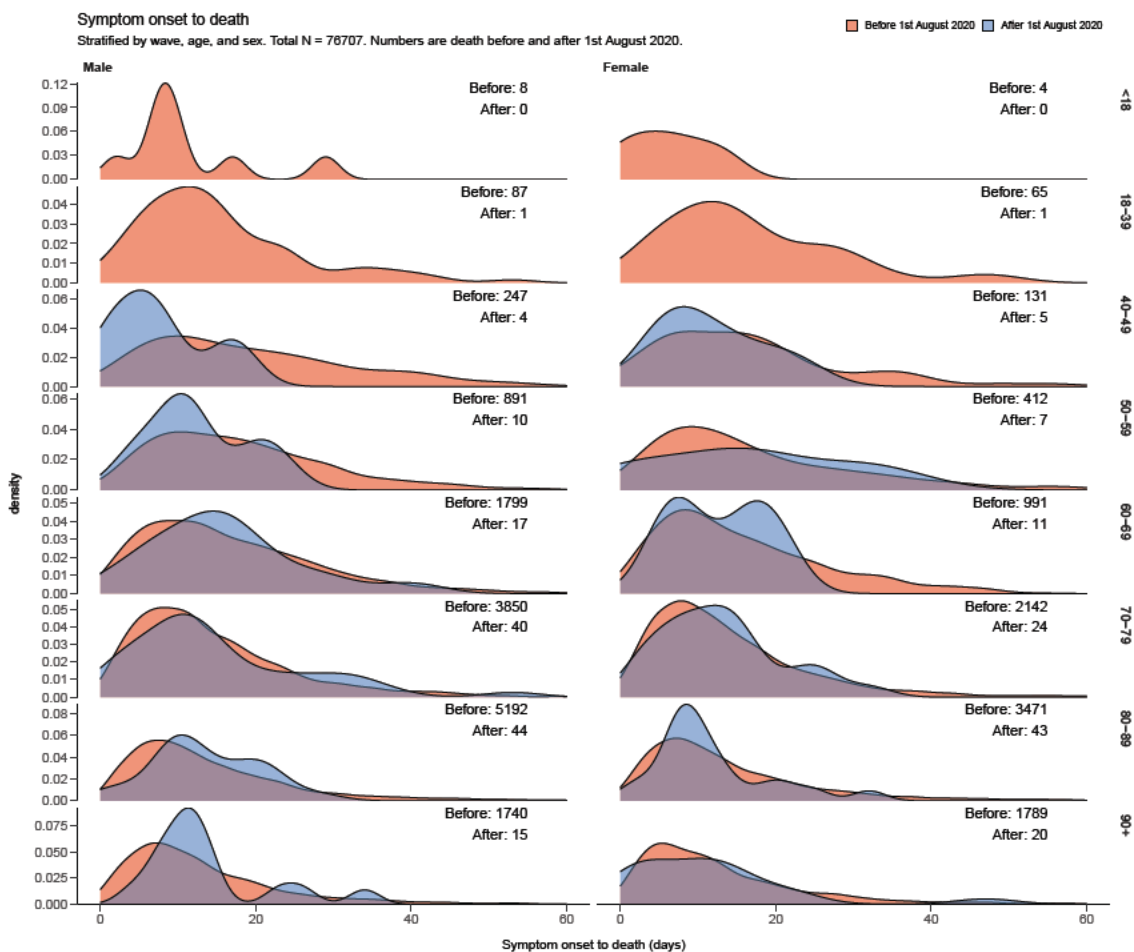


Figure 1: Symptom onset to death in hospitalised patients with COVID-19 stratified by age, sex, and date.

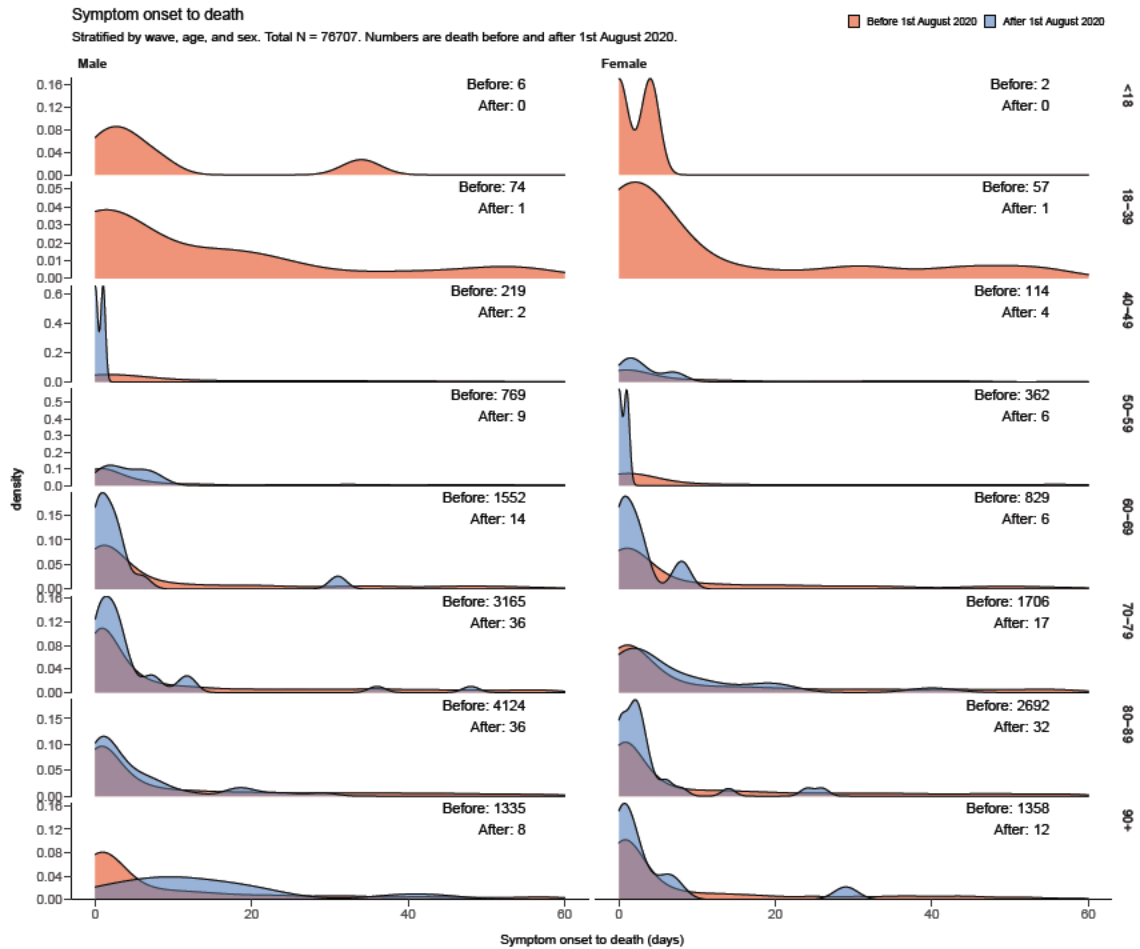


Figure 2: Hospital admission to death in hospitalised patients with COVID-19 stratified by age, sex, and date.