Case fatality by age in hospitalised patients

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Data and assumptions

CO-CIN is a clinical study of 19,949 COVID-19 patients admitted to UK hospitals

To avoid bias in the assessment of outcomes, patients admitted to hospital in the most recent 2 weeks are excluded.

Question 1

What is cases fatality rate amongst people under 45 with no known risk factors

i.e. not obese and without know co-morbidities.

Table 1: Case fatality from COVID-19 stratified by age and comorbidity

Age (years)	Comorbidity	Alive	Died
<45 y	No	383 (97.5)	10 (2.5)
<45 y	Yes	331 (91.4)	31 (8.6)
>=45 y	No	844 (66.9)	418 (33.1)
>=45 y	Yes	2825 (54.9)	2321 (45.1)

Data are n(%).

Comorbidity and age missing/unknown not shown.

Comorbidity is any of chronic heart disease, chronic lung diseasse, chronic kidney disease, asthma, liver disease, cancer, chronic neurological disease, chronic haematological disease, obesity, dementia, malnutrition, diabetes, AIDS/HIV.

Smoking is not included as comorbidity. Does not meaningfully change conclusion if it is included.

Question 2

Case fatality by age and obesity

Figure 1

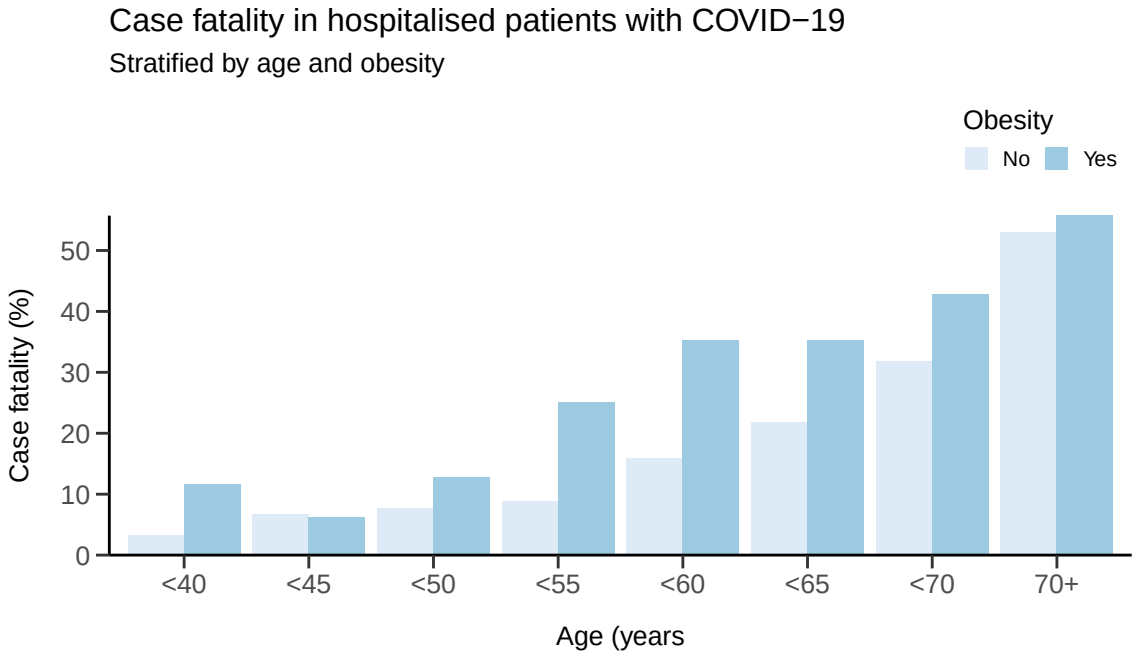

Figure 2

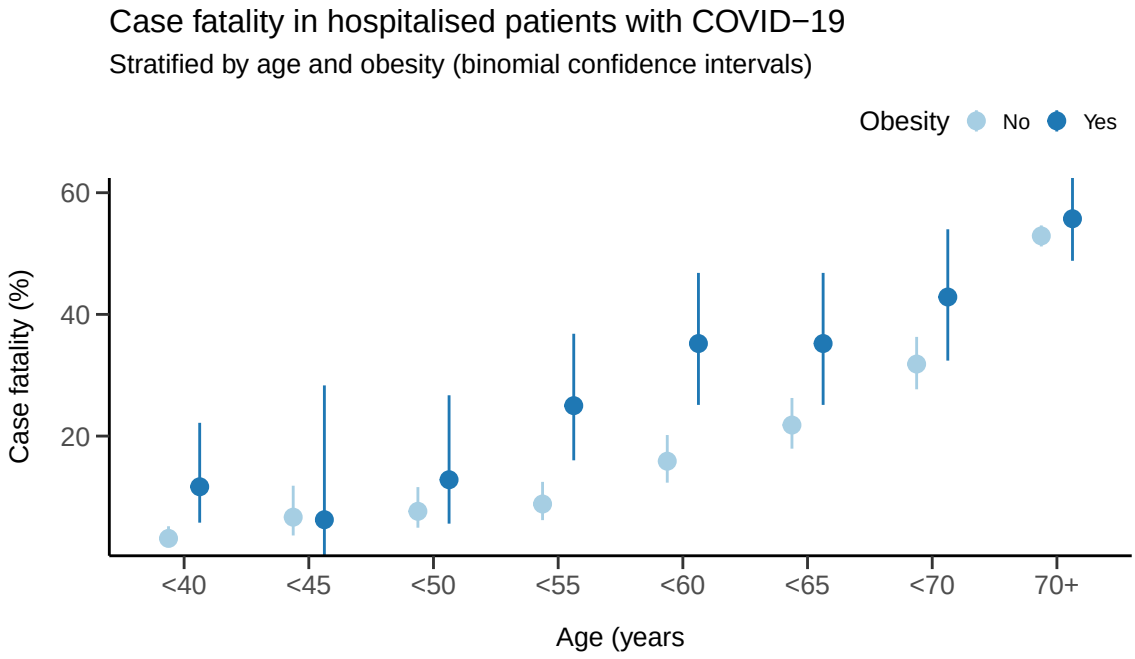

Table 2: Case fatality from COVID-19 stratified by age and obesity

Obesity	Age	Alive	Died
No	<40	457 (96.8)	15 (3.2)
No	<45	140 (93.3)	10 (6.7)
No	<50	230 (92.4)	19 (7.6)
No	<55	289 (91.2)	28 (8.8)
No	<60	281 (84.1)	53 (15.9)
No	<65	294 (78.2)	82 (21.8)
No	<70	304 (68.2)	142 (31.8)
No	70+	1511 (47.1)	1697 (52.9)
Yes	<40	53 (88.3)	7 (11.7)
Yes	<45	15 (93.8)	1 (6.2)
Yes	<50	34 (87.2)	5 (12.8)
Yes	<55	48 (75.0)	16 (25.0)
Yes	<60	46 (64.8)	25 (35.2)
Yes	<65	46 (64.8)	25 (35.2)
Yes	<70	44 (57.1)	33 (42.9)
Yes	70+	89 (44.3)	112 (55.7)

Data are n(%).