

CLINICAL AND EPIDEMIOLOGICAL CHARACTERISTICS OF PATIENTS DIAGNOSED WITH COVID-19 IN A TERTIARY CARE CENTER IN MEXICO CITY: A PROSPECTIVE COHORT STUDY

In the article, "Clinical and Epidemiological Characteristics of Patients Diagnosed with COVID-19 in a Tertiary Care Center in Mexico City: a Prospective Cohort Study" by Edgar Ortiz-Brizuela, Marco Villanueva-Reza, María F. González-Lara, Karla M. Tamez-Torres, Carla M. Román-Montes, and Bruno A. Díaz-Mejía,

et al. (*Revista de Investigación Clínica – Clinical and Translational Investigation*, 2020; 72:165-177 (<https://doi.org/10.24875/RIC.20000211>), the number of valid observations per covariate is omitted in tables 1-3. New tables with this information are provided. The authors apologize for this omission.

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and epidemiological characteristics of patients diagnosed with COVID-19 in a tertiary care center in Mexico city: a prospective cohort study. *Rev Invest Clin.* 2020;72:165-77.

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Table 1. Comparison of baseline and presenting characteristics between inpatients and outpatients with COVID-19 evaluated at the INCMNSZ (February 26, 2020, to April 11, 2020)

Characteristics	No. (%)			
	Total (n = 309)	Inpatients (n = 140)	Outpatients (n = 169)	p-value
Age, median (IQR), years, n = 309	43.00 (33.00, 54.00)	49.00 (39.00, 61.25)	39.00 (30.00, 49.00)	< 0.001
Sex, female	183/309 (59.2)	85/140 (60.7)	98/169 (58.0)	0.712
Health care worker	57/306 (18.6)	16/140 (11.4)	41/166 (24.7)	0.005
Comorbidities				
CCI, median (IQR), n = 309	0.00 (0.00, 1.00)	1.00 (0.00, 2.00)	0.00 (0.00, 1.00)	< 0.001
Type 2 diabetes	41/309 (13.3)	32/140 (22.9)	9/169 (5.3)	< 0.001
Hypertension	61/309 (19.7)	45/140 (32.1)	16/169 (9.5)	< 0.001
Cardiovascular disease	9/309 (2.9)	6/140 (4.3)	3/169 (1.8)	0.309*
Obesity	67/169 (39.6)	50/126 (39.7)	17/43 (39.5)	1
Overweight	67/169 (39.6)	52/126 (41.3)	15/43 (34.9)	0.576
COPD	3/309 (1.0)	2/140 (1.4)	1/169 (0.6)	0.592*
Asthma	9/309 (2.9)	2/140 (1.4)	7/169 (4.1)	0.191*
Immunosuppression	18/309 (5.8)	8/140 (5.7)	10/169 (5.9)	0.999*
Chronic liver disease	3/309 (1.0)	2/140 (1.4)	1/169 (0.6)	0.592*
Smoker (current or former)	47/309 (15.2)	25/140 (17.9)	22/169 (13.0)	0.264
Symptoms				
Days since symptom onset, median (IQR), n = 306	5.00 (2.00, 8.00)	7.00 (4.00, 9.00)	3.00 (2.00, 7.00)	< 0.001
Fever	243/306 (79.4)	131/140 (93.6)	112/166 (67.5)	< 0.001
Cough	262/306 (85.6)	128/140 (91.4)	134/166 (80.7)	0.013
Chest pain	117/306 (38.2)	53/140 (37.9)	64/166 (38.6)	0.994
Dyspnea	124/306 (40.5)	88/140 (62.9)	36/166 (21.7)	< 0.001
Headache	246/305 (80.7)	107/139 (77.0)	139/166 (83.7)	0.18
Irritability (%)	84/301 (27.9)	34/135 (25.2)	50/166 (30.1)	0.412
Diarrhea	94/306 (30.7)	48/140 (34.3)	46/166 (27.7)	0.264
Vomiting	30/306 (9.8)	18/140 (12.9)	12/166 (7.2)	0.145
Shaking chills	182/305 (59.7)	85/139 (61.2)	97/166 (58.4)	0.715
Abdominal pain	39/306 (12.7)	16/140 (11.4)	23/166 (13.9)	0.644
Myalgia	222/305 (72.8)	106/139 (76.3)	116/166 (69.9)	0.264
Arthralgia	199/305 (65.2)	95/139 (68.3)	104/166 (62.7)	0.358
Malaise	236/306 (77.1)	118/140 (84.3)	118/166 (71.1)	0.009
Rhinorrhea	126/306 (41.2)	44/140 (31.4)	82/166 (49.4)	0.002
Sore throat	161/305 (52.8)	65/139 (46.8)	96/166 (57.8)	0.07
Conjunctivitis	73/306 (23.9)	25/140 (17.9)	48/166 (28.9)	0.033
Anosmia	22/27 (81.5)	9/14 (64.3)	13/13 (100.0)	0.041*
Dysgeusia	6/9 (66.7)	5/8 (62.5)	1/1 (100.0)	0.999
Dermatosis	2/22 (9.1)	2/22 (9.1)	0/0 (—)	0.999*

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Table 1. Comparison of baseline and presenting characteristics between inpatients and outpatients with COVID-19 evaluated at the INCMNSZ (February 26, 2020, to April 11, 2020) (*continues from previous page*)

Characteristics	No. (%)			p-value
	Total (n = 309)	Inpatients (n = 140)	Outpatients (n = 169)	
Physical examination				
Weight, mean (SD), n = 171	78.00 (69.00, 88.00)	78.00 (70.00, 88.00)	76.00 (68.50, 89.50)	0.624
Height, mean (SD), n = 169	1.65 (0.10)	1.65 (0.10)	1.66 (0.09)	0.524†
BMI, median (IQR), kg/m², n = 169	29.00 (25.60, 31.24)	29.10 (25.60, 31.22)	27.60 (25.10, 31.61)	0.309
Body temperature, median (IQR), °C, n = 224	37.00 (36.50, 37.82)	37.20 (36.50, 38.00)	36.70 (36.20, 37.50)	0.002
Heart rate, mean (SD), bpm, n = 231	97.45 (17.54)	101.39 (18.26)	91.38 (14.48)	< 0.001†
Respiratory rate, median (IQR), rpm, n = 231	20.00 (18.00, 24.00)	22.00 (20.00, 25.00)	19.00 (17.00, 21.00)	< 0.001
Oxygen saturation (FiO ₂ 21%), median (IQR), %, n = 222	92.00 (88.00, 94.00)	89.00 (86.00, 92.00)	94.00 (93.00, 96.00)	< 0.001
Arterial pressure, median (IQR), n = 231				
Systolic, mmHg	122.00 (112.00, 134.00)	120.00 (110.75, 134.25)	125.00 (117.00, 133.00)	0.155
Diastolic, mmHg	78.00 (70.00, 85.50)	75.00 (67.00, 81.00)	80.00 (70.00, 90.00)	0.002
Mean, mmHg	92.33 (83.67, 100.33)	90.50 (83.33, 99.00)	94.67 (86.67, 104.33)	0.006

BMI: body mass index; bpm: beats per minute; CCI: Charlson Comorbidity Index; COPD: chronic obstructive pulmonary disease; FiO₂: fraction of inspired oxygen; INCMNSZ: Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán; IQR: interquartile range; rpm: breaths per minute. *Fisher's exact test. †Unpaired Student's t-test.

Table 2. Comparison of baseline and presenting characteristics of inpatients with COVID-19 according to their requirement of intensive care at the INCMNSZ (February 26, 2020, to April 11, 2020)

Characteristics	No. (%)		p-value
	ICU (n = 29)	non-ICU (n = 111)	
Age, median (IQR), years, n = 140	53.00 (40.00, 64.00)	48.00 (39.00, 60.50)	0.271
Sex, female	9/29 (31.0)	46/111 (41.4)	0.419
Health care worker	4/29 (13.8)	12/111 (10.8)	0.743*
Comorbidities			
CCI, median (IQR), n = 140	1.00 (0.00, 3.00)	1.00 (0.00, 2.00)	0.066
Type 2 diabetes mellitus	12/29 (41.4)	20/111 (18.0)	0.016
Hypertension	10/29 (34.5)	35/111 (31.5)	0.936
Cardiovascular disease	1/29 (3.4)	5/111 (4.5)	1*
Obesity	15/29 (51.7)	35/97 (36.1)	0.196
Overweight	10/29 (34.5)	42/97 (43.3)	0.528
COPD	1/29 (3.4)	1/111 (0.9)	0.373*
Asthma	0/29 (0.0)	2/111 (1.8)	1*
Immunosuppression	3/29 (10.3)	5/111 (4.5)	0.362*
Chronic liver disease	1/29 (3.4)	1/111 (0.9)	0.373*
Smoker (current or former)	7/29 (24.1)	18/111 (16.2)	0.536*
Symptoms			
Days since symptom onset, median (IQR), n = 140	8.00 (6.00, 12.00)	7.00 (4.50, 9.00)	0.21
Fever	28/29 (96.6)	103/111 (92.8)	0.685*
Cough	28/29 (96.6)	100/111 (90.1)	0.46*
Chest pain	16/29 (55.2)	37/111 (33.3)	0.052
Dyspnea	22/29 (75.9)	66/111 (59.5)	0.158
Headache	18/29 (62.1)	89/110 (80.9)	0.058
Irritability (%)	9/27 (33.3)	25/108 (23.1)	0.399
Diarrhea	11/29 (37.9)	37/111 (33.3)	0.807
Vomiting	7/29 (24.1)	11/111 (9.9)	0.059*
Shaking chills	17/29 (58.6)	68/110 (61.8)	0.92
Abdominal pain	7/29 (24.1)	9/111 (8.1)	0.024*
Myalgia	23/29 (79.3)	83/110 (75.5)	0.85
Arthralgia	21/29 (72.4)	74/110 (67.3)	0.76
Malaise	22/29 (75.9)	96/111 (86.5)	0.266
Rhinorrhea	6/29 (20.7)	38/111 (34.2)	0.24
Sore throat	17/29 (58.6)	48/110 (43.6)	0.219
Conjunctivitis	6/29 (20.7)	19/111 (17.1)	0.861
Anosmia	0/2 (0.0)	9/12 (75.0)	0.11*
Dysgeusia	0/2 (0.0)	5/6 (83.3)	0.206
Dermatosis	0/6 (0.0)	2/16 (12.5)	0.94

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Table 2. Comparison of baseline and presenting characteristics of inpatients with COVID-19 according to their requirement of intensive care at the INCMNSZ (February 26, 2020, to April 11, 2020) (*continues from previous page*)

Characteristics	No. (%)		p-value
	ICU (n = 29)	non-ICU (n = 111)	
Physical examination			
Weight, median (IQR), n = 128	80.00 (70.00, 90.00)	78.00 (69.00, 87.00)	0.185
Height, median (IQR), n = 126	1.65 (1.60, 1.70)	1.65 (1.58, 1.72)	0.765
BMI, median (IQR), kg/m ² , n = 126	30.50 (27.04, 33.87)	28.57 (25.50, 31.20)	0.037
Body temperature, median (IQR), °C, n = 136	37.30 (36.78, 37.95)	37.20 (36.50, 38.00)	0.382
Heart rate, median (IQR), bpm, n = 140	109.00 (94.00, 120.00)	101.00 (86.50, 114.00)	0.068
Respiratory rate, median (IQR), rpm, n = 140	26.00 (22.00, 30.00)	22.00 (19.50, 24.00)	< 0.001
Oxygen saturation (FiO ₂ 21%), median (IQR), %, n = 133	83.50 (76.00, 88.00)	89.00 (87.00, 92.00)	< 0.001
Arterial pressure, median (IQR), n = 140			
Systolic, mmHg	124.00 (110.00, 137.00)	120.00 (112.00, 133.00)	0.857
Diastolic, mmHg	74.00 (62.00, 82.00)	76.00 (68.50, 81.00)	0.877
Mean, mmHg	90.00 (83.33, 97.33)	91.00 (83.33, 100.00)	0.811

BMI: body mass index; bpm: beats per minute; CCI: Charlson Comorbidity Index; COPD: chronic obstructive pulmonary disease; FiO₂: fraction of inspired oxygen; ICU: intensive care unit; INCMNSZ: Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán; IQR: interquartile range; rpm: breaths per minute.
*Fisher's exact test.

Table 3. Baseline prognostic scores and laboratory findings of inpatients with COVID-19 according to their requirement of intensive care at the INCMNSZ (February 26, 2020, to April 11, 2020)

Baseline prognostic scores	Median (IQR)		p-value
	ICU (n = 29)	non-ICU (n = 111)	
qSOFA, n = 140	1.00 (1.00, 1.00)	1.00 (0.00, 1.00)	0.021
NEWS, n = 139	8.00 (7.00, 10.00)	6.00 (4.00, 8.00)	< 0.001
MuLBSTA, n = 140	9.00 (8.00, 12.00)	8.00 (5.00, 9.00)	0.006
High-risk MuLBSTA, n (%)	1/29 (72)	101/111 (91)	0.013
Laboratory findings			
Complete blood count, n = 140			
White blood cell count, $\times 10^9/L$	8.1 (5.5, 11.2)	6.0 (4.6, 8.05)	0.002
Neutrophil count, $\times 10^9/L$	7.2 (4.3, 9.4)	4.4 (3.1, 6.3)	0.001
Lymphocyte count, $\times 10^9/L$	0.68 (0.5, 1.1)	0.88 (0.62, 1.1)	0.185
Hemoglobin, g/dL	15.50 (14.00, 16.60)	15.60 (14.00, 16.95)	0.422
Platelet count, $\times 10^9/L$	213.00 (175.00, 283.00)	193.00 (161.00, 231.00)	0.034
Basic metabolic panel			
Creatinine, mg/dL, n = 140	0.90 (0.74, 1.09)	0.90 (0.70, 1.10)	0.559
Blood urea nitrogen, mg/dL, n = 140	15.40 (10.90, 16.70)	12.30 (10.20, 16.10)	0.067
Sodium, mmol/L, n = 139	136.00 (133.00, 138.00)	136.00 (133.00, 138.00)	0.741
Potassium, mmol/L, n = 139	4.00 (3.66, 4.06)	4.02 (3.76, 4.30)	0.107
Liver function tests, n = 140			
Alanine aminotransferase, U/L	42.00 (26.00, 53.00)	34.00 (22.90, 55.05)	0.349
Aspartate aminotransferase, U/L	56.00 (34.00, 68.00)	34.00 (25.00, 51.50)	0.004
Alkaline phosphatase, U/L	90.00 (63.00, 112.00)	82.00 (64.50, 99.50)	0.299
Total bilirubin, mg/dL	0.59 (0.49, 0.73)	0.50 (0.41, 0.66)	0.118
Albumin, g/dL	3.30 (3.13, 3.80)	4.00 (3.72, 4.20)	< 0.001
Globulin, g/dL	3.34 (2.93, 3.51)	3.10 (2.83, 3.27)	0.047
Acute-phase reactants			
C-reactive protein, mg/dL, n = 137	13.74 (11.02, 18.98)	6.50 (2.39, 12.91)	< 0.001
Ferritin, ng/mL, n = 131	646.50 (311.82, 891.25)	335.00 (203.00, 603.00)	0.008
Erythrocyte sedimentation rate, mm/hr, n = 27	34.00 (24.00, 37.50)	19.00 (10.25, 26.00)	0.127
Procalcitonin, ng/mL, n = 38	0.56 (0.48, 0.80)	0.05 (0.05, 0.11)	< 0.001
Arterial blood gases, n = 122			
pH	7.46 (7.43, 7.48)	7.45 (7.42, 7.48)	0.616
PaO ₂ , mmHg	63.90 (55.95, 93.50)	59.00 (54.00, 68.00)	0.171
PaCO ₂ , mmHg	31.00 (28.50, 35.35)	32.00 (29.20, 34.00)	0.737
PaO ₂ /FiO ₂ ratio	195.00 (99.83, 252.50)	271.43 (245.71, 302.67)	< 0.001
HCO ₃ , mmol/L	22.00 (19.10, 24.00)	21.80 (20.60, 22.70)	0.47
Lactate, mmol/L	1.15 (1.00, 1.45)	1.00 (0.90, 1.30)	0.18

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Table 3. Baseline prognostic scores and laboratory findings of inpatients with COVID-19 according to their requirement of intensive care at the INCMNSZ (February 26, 2020, to April 11, 2020) (*continues from previous page*)

Baseline prognostic scores	Median (IQR)		p-value
	ICU (n = 29)	non-ICU (n = 111)	
Others			
Fibrinogen, mg/dL, n = 90	684.00 (485.00, 771.25)	491.00 (415.00, 665.25)	0.008
D-dimer, ng/mL, n = 127	729.00 (527.00, 1328.72)	454.00 (353.00, 723.50)	< 0.001
Creatinine phosphokinase, U/L, n = 110	126.00 (68.25, 272.00)	104.50 (57.00, 245.25)	0.593
Cardiac troponin I, pg/mL, n = 96	10.60 (5.62, 16.52)	4.00 (2.80, 5.50)	< 0.001
Lactate dehydrogenase, U/L, n = 139	488.00 (325.00, 577.00)	266.50 (218.75, 351.75)	< 0.001

FiO₂: fraction of inspired oxygen; ICU: intensive care unit; INCMNSZ: Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán; IQR: interquartile range; NEWS: National Early Warning Score; MulBSTA: multilobular infiltration; hypolymphocytosis: bacterial coinfection; smoking history: hypertension and age score; NIH: National Institute of Health; qSOFA: quick sequential organ failure assessment.