Supplementary Material

Supplementary Methods

Study population

The COGEN (COvid and GENder) study is an observational cohort study of polymerase chain reaction confirmed SARS-CoV-2 infected individuals diagnosed between February and December 2020 at one of four Swiss study sites including the University Hospital Basel, the University Hospital Zurich, the University Hospital Bern, and the Cantonal Hospital of Baden. Eligible patients were individuals aged ≥18 years. Informed consent was obtained from all patients or their legally authorized representative, as appropriate. The study design and methodology had been established and validated prior to the start of patient recruitment and were approved by the responsible ethics committee of the canton of Basel (EKNZ, ethics approval #2020-01311). A flowchart depicting patient recruitment is provided in **Supplementary Figure 1.**

Data acquisition and study questionnaire

Clinical data of each patient were gathered from electronic medical records at the time of presentation (ambulatory patients) and during hospital stay (admitted patients). Patients or their next of kin were contacted by telephone and asked to complete a questionnaire containing questions on socio-demographics, lifestyle variables, medical comorbidities and risk factors, quality of life, gender-related and sex-specific parameters (e.g. specific hormone treatments). To maintain power of analysis, gender was reduced to one single variable ("gender score") between 0 and 100, as previously reported by Pelletier et al.[1,2] All questionnaire data were collected through the Research Electronic Data Capture (REDCap) survey system.

Assessment of sex and gender

Biological sex is assigned at birth and is defined as a person's biological characteristics such as sex chromosomes, hormone concentrations, and sex organ physiology. In our study, sex was assessed as a binary variable with the answering options "male" or "female. In contrast to sex, gender incorporates psychological, behavioural, social, and cultural aspects, i.e. the sociocultural dimension of being a woman or a man in a given society.[3-5] Gender is composed of four dimensions, reflecting different aspects, e.g. gender roles, gender relations, institutionalized gender, and gender identity.[6,7] Both variables are increasingly recognized as major determinants of health and disease. Nevertheless, the assessment of the sociocultural dimension gender remains a challenge, as many variables need to be considered. There is a general agreement that income, education, responsibility for household work, stress level at home, responsibility for childcare as well as psychological traits associated with femininity/masculinity contribute to gender. [8-12,3,13] To reduce the complexity of gender into a single variable, comparable to biological sex, Pelletier et al. developed a gender score, based on more than 50 variables known to characterise women and men based on sociological evidence. These 50 variables were reduced to key non-redundant items. The latter are acquired via questionnaires and used to construct a gender score, which is a continuous variable ranging between 0 and 100.[1,2] A long version of the questionnaire as well as a short version containing only seven questions was developed and validated in the Canadian GENESIS-PRAXY cohort and was successfully adapted to a German population.[14,11] The short version of the questionnaire was adapted to the Swiss societal system and comprises seven items that were "historically reported as being different in men and women".[14,11] The seven items contained education, parental status, marital status, income (main earner or not), responsibility for household work, stress level at home, responsibility for childcare as well as ten questions on femininity/masculinity as assessed by the well-established BEM sex-role inventory scale (**Supplementary Figure 2**).[15] The gender score was estimated using a logistic regression model, in which (binary) sex is the dependent variable. Therefore, the estimated gender score is the predicted probability of being a woman according to sociocultural variables only, derived from the fitted regression model. The gender

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score ranges between 0 and 100 with higher values reflecting characteristics traditionally considered feminine and lower values reflecting characteristics traditionally considered masculine.

Statistical analysis

The primary endpoint of this study was defined as a composite of admission to intermediate or intensive care, the need for invasive ventilatory support, and/or death during hospital stay or within 30 days following discharge, as previously reported.[16] Multiple logistic regression models with backward selection method were applied to assess the potential predictors (indicated in the figure legend) of the study endpoint. Gender was either included as summary variable (gender score) or as multiple variables comprising all parameters that were used to calculate the gender score. First, all potential variables were included into the full model. Then, reduced models were built by removing variables with a p-value >0.2 from the model, one at a time, until all remaining variables had a p-value of <0.15.[17] Some variables such as age, sex, and gender score were forced to stay in the model despite a p-value of >0.15. The goodness of fit of the resulting model was assessed by using likelihood ratio tests comparing it with the full and the reduced model. After the final model was built, the interaction between sex and other variables was explored. The Least Absolute Shrinkage and Selection Operator (LASSO) with extended Bayesian information criterion (EBIC) selection method was performed as a sensitivity analysis using a built-in command "*lasso2*". Imputation for missing variables was not performed in this study as missing rates were <2%, and it could be assumed that data are missing completely at random (MCAR). Descriptive statistics were presented as appropriate. Estimated effect sizes were presented as adjusted odds ratio (OR) and 95% confidence interval (CI). Statistical analyses were performed using Stata IC15 (StataCorp, 2017, College Station, TX, USA).

Supplementary results

Patient characteristics

The study population comprised 1357 (45.2%) women and 1648 (54.8%) men with a mean age of 44.8±17.5 years (**Supplementary Table 1**). Men were significantly older than women (46.4±17.8 years vs 42.9±16.9 years in women, p<0.001, **Supplementary Table 1**), had a higher BMI (26.3±4.3 kg/m^2 vs 24.5±5.3 kg/m^2, p<0.001), and a higher number of cardiovascular risk factors (CVRFs) (0.85±1.16 vs 0.51±0.89, p<0.001, **Supplementary Table 1**). In hospitalized patients, sex-differences in baseline characteristics were less pronounced or no longer evident (**Supplementary Table 2**). Consistent with global Swiss data reported by the Swiss Federal Statistical Office,[18] a greater proportion of women than men reported to earn the lowest income in their household (42.7% vs 15.9%, p<0.001, **Supplementary Table 3**). In addition, women were more often single parents (10.5% vs 6.0%, p<0.001), more often divorced/separated (10.7% vs 8.1%, p=0.011) or widowed (3.8% vs 2.4%, 0.011) and less often in a partnership or married (65.9% vs 68.7%, p=0.011) than men. Women were more often responsible for household work (39.4% vs 16.1%, p<0.001) and caring duties (score from 1 [no responsibility] to 6 [full responsibility]: 1.92±2.28 vs 1.65±2.09, p<0.001). No sex differences in educational qualification were noted (p=0.120, **Supplementary Table 3**). Conversely, in hospitalized patients, educational qualification was overall lower than in the total population, and higher in men as compared to women (p<0.001, data not shown), while similar trends and sex differences were observed for other sociocultural variables. Out of 3005 individuals who were tested positive for SARS-CoV-2, 2401 (79.9%) patients remained outpatients and 604 (20.1%) patients (194 [14.3%] women vs 410 [24.9%] men, p<0.001) were hospitalized. Three-hundred sixty-eight (12.2%) patients (136 [10.0%] women and 232 [14.1%] men) were admitted to a normal ward and 236 (7.9%) patients (58 [4.3%] women and 178 [10.8%] men) needed IMC or ICU care (p<0.001 for women vs men, **Supplementary Table 4**). Amongst hospitalized patients, men more often than women received circulatory support (30% vs 19.1% in women, p=0.004) and renal replacement therapies (8.1% vs 3.1%, p=0.021), while a similar percentage of women and men received respiratory support (41.7% of men and 42.8% of women, p=0.802, **Supplementary Table 4**). COVID-19 medical

treatment with corticosteroids was the most frequently administered therapy (39.7% of hospitalized patients), with men receiving this therapy more often than women (43.4% vs 32.0%, p=0.007, **Supplementary Table 4**).

Study limitations

Our study has several limitations related to its cross-sectional and observational design. First, although the variables in our study covered many aspects of sex- and gender-specific demographic, behavioral and contextual characteristics, residual confounding due to unmeasured parameters in our dataset is possible. Second, our study was conducted in Switzerland, a high-income country with a high gender-equality index. Given that gender-related characteristics are culturally sensitive, our observations may not be extrapolated to other societies and geographical regions. Third, our study was conducted during an early phase of the pandemic in patients infected with the wildtype of SARS-CoV-2 and our data may not be generalizable to infections with variants, especially omicron. In addition, results may not be generalizable to vaccinated or immune individuals. Finally, 76 patients (2.5%) of our study population did not answer the questionnaire themselves due to severe illness or death. Also, patients were contacted to answer the questionnaire with a time lag of at least 60 days following first diagnosis of SARS-CoV-2 infection to allow time for recovery and rehabilitation. Although only a small percentage (2.5%) of the study population did not answer the study questionnaire themselves and stable conditions showed a minimal recall bias (correlation of 0.8) in our study, the occurrence of a reporting or recall bias, respectively, cannot completely be ruled out.

References Supplementary Material

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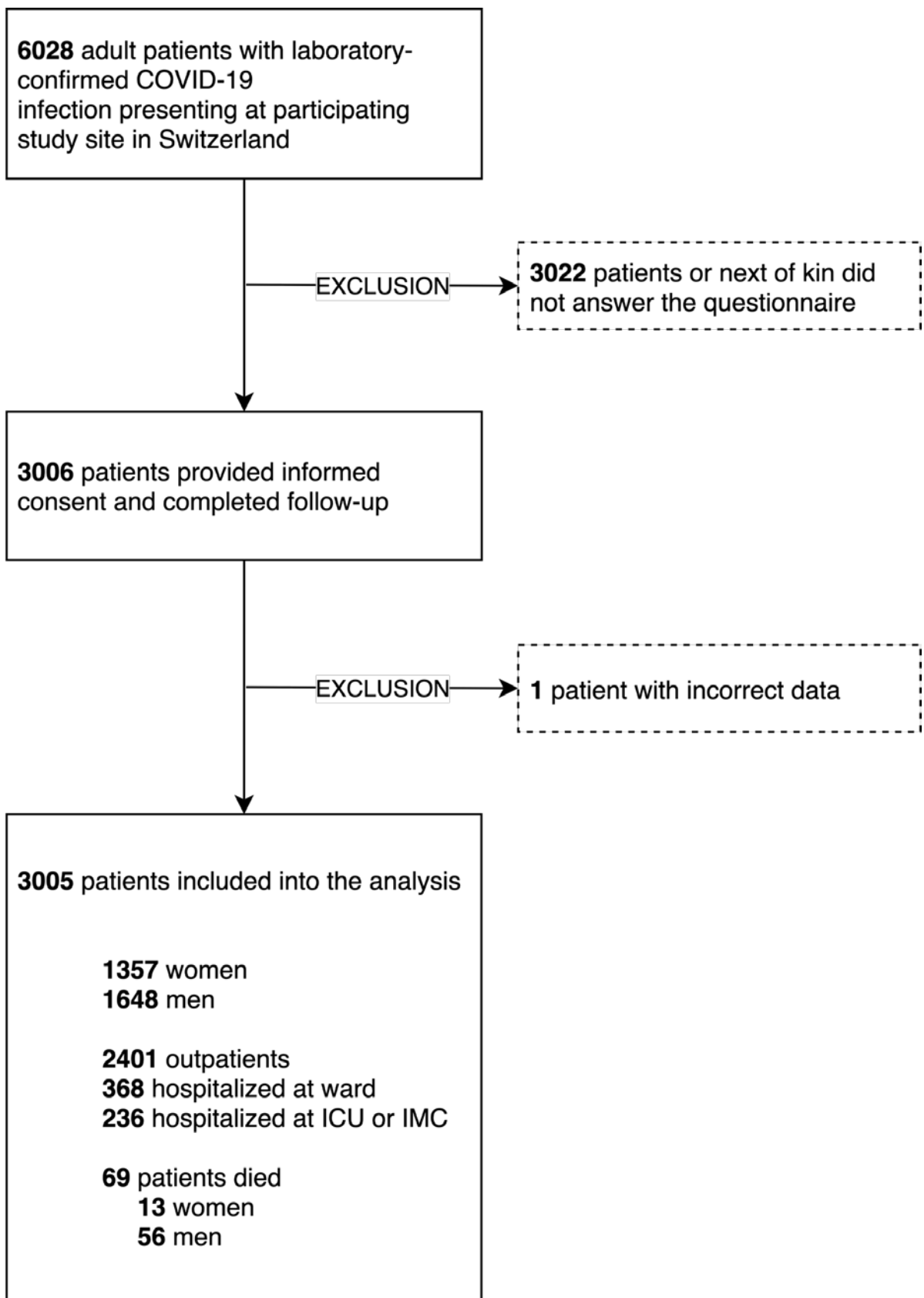
Supplementary Figure 1: Flow chart depicting patient recruitment and exclusion. ICU, intensive care unit; IMC, intermediate care unit.

Are/were you a single parent?	○ Yes
	○ No
	○ I do not have children

What is your marital status?	○ Married, living together with spouse
	○ Married, but permanently living apart
(Select **only one** answer)	○ Registered same-sex partnership, living together
	○ Registered same-sex partnership, living apart
	○ Single, permanent partnership
	○ Single, living alone
	○ Divorced / partnership dissolved
	○ Widowed / life partner deceased

What educational qualifications have you gained? Only tick the highest degree that you gained. (Select **only one** answer)	○ No degree
	○ Completion of secondary education
	○ Apprenticeship / vocational qualification, specialist baccalaureate, Higher school certificate
	○ College, technical college or university

Do you earn the highest income in your household?	○ Yes
	○ No
	○ The partners contribute in roughly equal shares
	○ I live alone

Are you the main person responsible for the household work in your household?	○ Yes
	○ No
	○ The partners contribute in roughly equal shares
	○ I live alone

On a scale of 1 to 10, how stressed are you at home?

Assign an appropriate number to yourself:

(1) = No stress, (10) = Maximum stress

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Stress at home	○	○	○	○	○	○	○	○	○	○

To what extent are you responsible for the care or upbringing of children or grandchildren and/or the care of others living in your household?

Assign yourself an appropriate number:

(0) = Not applicable

(1) = I have no responsibility

(6) = I take full responsibility

	(0)	(1)	(2)	(3)	(4)	(5)	(6)
Responsibility	○	○	○	○	○	○	○

On a scale of 1 to 7, please rate the extent to which the following descriptions apply to you.

(1) = Never true or almost never

(7) = True (nearly) always

I am someone who...

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
... defends his own opinion.	○	○	○	○	○	○	○
... has leadership qualities.	○	○	○	○	○	○	○
... is independent.	○	○	○	○	○	○	○
... is willing to take risks.	○	○	○	○	○	○	○
... is positive.	○	○	○	○	○	○	○
... is assertive.	○	○	○	○	○	○	○
... has a strong personality.	○	○	○	○	○	○	○
... is ready to take a stand.	○	○	○	○	○	○	○
... is energetic.	○	○	○	○	○	○	○
... is aggressive.	○	○	○	○	○	○	○

If you assess yourself: Do you have only male or only female characteristics or both?

Assign a corresponding number to yourself:

(1) = more male characteristics

(7) = more female characteristics

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
I feel that I am...	○	○	○	○	○	○	○

Supplementary Figure 2: Gender-related questions included in the questionnaire.

Patient demographic characteristics	Overall n=3005	Men n=1648	Women n=1357	p-value
Age (years), mean (SD)	44.8 (17.5)	46.4 (17.8)	42.9 (16.9)	<0.001
BMI (kg/m^2), mean (SD)	25.5 (4.9)	26.3 (4.3)	24.5 (5.3)	<0.001
Cardiovascular risk factors				
Number of cardiovascular risk factors, mean (SD)	0.70 (1.06)	0.85 (1.16)	0.51 (0.89)	<0.001
Hypertension, n (%)	596 (19.8)	405 (24.6)	191 (14.1)	<0.001
Diabetes mellitus, n (%)	235 (7.8)	176 (10.7)	59 (4.3)	<0.001
Present smoking, n (%)	228 (7.6)	138 (8.4)	90 (6.6)	0.073
Obesity (BMI>30 kg/m^2), n (%)	556 (18.5)	328 (19.9)	228 (16.8)	0.029
Family history of CAD, n (%)	59 (2.0)	42 (2.5)	17 (1.3)	0.011
Dyslipidaemia, n (%)	235 (7.8)	173 (10.5)	62 (4.6)	<0.001
Pre-existing comorbidities				
Mental disorders, n (%)	130 (4.3)	60 (3.6)	70 (5.2)	0.042
Autoimmune/rheumatoid disease, n (%)	202 (6.7)	87 (5.3)	115 (8.5)	<0.001
Chronic pulmonary disease, n (%)	310 (10.3)	166 (10.1)	144 (10.6)	0.630
Neurological disease, n (%)	162 (5.4)	88 (5.3)	74 (5.5)	0.890
Cancer, n (%)	155 (5.2)	99 (6.0)	56 (4.1)	0.020
Medication				
All cardiovascular drugs, n (%)	518 (17.2)	356 (21.6)	162 (11.9)	<0.001
ACE inhibitors, n (%)	370 (12.3)	254 (15.4)	116 (8.5)	<0.001
Aldosterone antagonists, n (%)	27 (0.9)	21 (1.3)	6 (0.4)	0.016
Lipid lowering drugs, n (%)	229 (7.6)	172 (10.4)	57 (4.2)	<0.001
Anticoagulant/antithrombotic medication, n (%)	188 (6.3)	141 (8.6)	47 (3.5)	<0.001
Antidiabetics, n (%)	174 (5.8)	134 (8.1)	40 (2.9)	<0.001
Asthma/COPD treatment, n (%)	135 (4.5)	68 (4.1)	67 (4.9)	0.290
Analgesics, n (%)	323 (10.7)	141 (8.6)	182 (13.4)	<0.001
Immunosuppressive medication, n (%)	73 (2.4)	37 (2.2)	36 (2.7)	0.470
Antidepressants, n (%)	77 (2.6)	31 (1.9)	46 (3.4)	0.009
Neurologic drugs	23 (0.8)	10 (0.6)	13 (1.0)	0.270
Anti-infective agents/HIV medication, n (%)	20 (0.7)	19 (1.2)	1 (0.1)	<0.001
Thyroid hormones, n (%)	66 (2.2)	8 (0.5)	58 (4.3)	<0.001
Other medications, n (%)	99 (3.3)	40 (2.4)	59 (4.3)	0.003

Supplementary Table 1: Baseline characteristics of the total study population stratified by sex. P-values are reported for comparison between women and men. SD, standard deviation; BMI, body mass index; CAD, coronary artery disease; ACE, angiotensin converting enzyme; COPD, chronic obstructive pulmonary disease; HIV, human immunodeficiency virus.

Patients demographic characteristics	Overall (n=604)	Men (n=410)	Women (n=194)	p-value
Age (years), mean (SD)	63.37 (15.92)	64.26 (14.87)	61.47 (17.82)	0.044
BMI (kg/m^2), mean (SD)	28.03 (5.42)	27.79 (4.75)	28.54 (6.60)	0.110
Cardiovascular risk factors				
Number of cardiovascular risk factors, mean (SD)	1.77 (1.31)	1.86 (1.30)	1.48 (1.29)	0.001
Hypertension, n (%)	346 (57.3)	245 (59.8)	101 (52.1)	0.074
Diabetes mellitus, n (%)	163 (27.0)	123 (30.0)	40 (20.6)	0.015
Present smoking, n (%)	35 (5.8)	27 (6.6)	8 (4.1)	0.230
Obesity (BMI>30 kg/m^2), n (%)	218 (36.1)	144 (35.1)	74 (38.1)	0.470
Family history of CAD, n (%)	39 (6.5)	32 (7.8)	7 (3.6)	0.050
Dyslipidemia, n (%)	171 (28.3)	128 (31.2)	43 (22.2)	0.021
Pre-existing comorbidities				
Psychiatric disease, n (%)	71 (11.8)	32 (7.8)	39 (20.1)	<0.001
Autoimmune/rheumatoid disease, n (%)	90 (14.9)	51 (12.4)	39 (20.1)	0.014
Chronic pulmonary disease, n (%)	125 (20.7)	85 (20.7)	40 (20.6)	0.970
Neurological disease, n (%)	97 (16.1)	64 (15.6)	33 (17.0)	0.660
Cancer, n (%)	97 (16.1)	68 (16.6)	29 (14.9)	0.610
Medications				
All cardiovascular drugs, n (%)	285 (47.2)	207 (50.5)	78 (40.2)	0.018
ACE inhibitors, n (%)	249 (41.2)	179 (43.7)	70 (36.1)	0.077
Aldosterone antagonists, n (%)	24 (4.0)	19 (4.6)	5 (2.6)	0.230
Lipid lowering drugs, n (%)	136 (22.5)	102 (24.9)	34 (17.5)	0.043
Anticoagulant/antithrombotic medication, n (%)	114 (18.9)	88 (21.5)	26 (13.4)	0.018
Antidiabetics, n (%)	116 (19.2)	89 (21.7)	27 (13.9)	0.023
Asthma/COPD treatment, n (%)	54 (8.9)	34 (8.3)	20 (10.3)	0.420
Analgesics, n (%)	119 (19.7)	68 (16.6)	51 (26.3)	0.005
Immunosuppressive medication, n (%)	37 (6.1)	24 (5.9)	13 (6.7)	0.690
Antidepressants, n (%)	24 (4.0)	10 (2.4)	14 (7.2)	0.005
Neurologic drugs	9 (1.5)	6 (1.5)	3 (1.5)	0.940
Anti-infective agents/HIV medication, n (%)	6 (1.0)	5 (1.2)	1 (0.5)	0.420
Thyroid hormones, n (%)	11 (1.8)	1 (0.2)	10 (5.2)	<0.001
Antiandrogens, n (%)	4 (0.7)	4 (1.0)	0 (0.0)	0.170
Other medications, n (%)	29 (4.8)	17 (4.1)	12 (6.2)	0.270

Supplementary Table 2: Patient characteristics **of hospitalized patients**. P-values are reported for comparison between women and men. SD, standard deviation; BMI, body mass index; CAD, coronary artery disease; CVRF, cardiovascular risk factors; ACE, angiotensin-converting enzyme; COPD, chronic obstructive pulmonary disease; HIV, human immunodeficiency virus.

Sociocultural and economic variables	Overall n=3005	Men n=1648	Women n=1357	p-value
Healthcare worker, n (%)	578 (19.4%)	179 (10.9%)	399 (29.7%)	<0.001
Source of infection				
Public places/events, n (%)	885 (29.5%)	527 (32.0%)	358 (26.4%)	<0.001
At home/family/partner, n (%)	773 (25.7%)	353 (21.4%)	420 (31.0%)	<0.001
Unknown, n (%)	632 (21.0%)	368 (22.3%)	264 (19.5%)	0.054
Work, n (%)	620 (20.6%)	324 (19.7%)	296 (21.8%)	0.150
Abroad (European country), n (%)	197 (6.6%)	119 (7.2%)	78 (5.7%)	0.100
Health care facility, n (%)	123 (4.1%)	73 (4.4%)	50 (3.7%)	0.300
Parenthood				<0.001
Two-parent family, n (%)	1737 (58.4)	1020 (62.6)	717 (53.3)	
Single-parent family, n (%)	238 (8.0)	97 (6.0)	141 (10.5)	
No children, n (%)	999 (33.6)	513 (31.5)	486 (36.2)	
Marital status				0.011
Married/partnership, n (%)	2013 (67.4)	1122 (68.7)	891 (65.9)	
Divorced/separated, n (%)	277 (9.3)	132 (8.1)	145 (10.7)	
Single, n (%)	605 (20.3)	340 (20.8)	265 (19.6)	
Widowed, n (%)	91 (3.0)	40 (2.4)	51 (3.8)	
Education				0.120
No educational qualification, n (%)	195 (6.5)	107 (6.5)	88 (6.5)	
Primary education, n (%)	207 (6.9)	97 (5.9)	110 (8.1)	
Secondary education or vocational degree, n (%)	1191 (39.9)	654 (40.0)	537 (39.8)	
University or technical college degree, n (%)	1392 (46.6)	777 (47.5)	615 (45.6)	
Income				<0.001
Earns highest income in household, n (%)	1082 (36.4)	818 (50.4)	264 (19.6)	
Earns lowest income in household, n (%)	835 (28.1)	258 (15.9)	577 (42.7)	
Equal between partners, n (%)	463 (15.6)	241 (14.8)	222 (16.4)	
Lives alone, n (%)	594 (20.0)	307 (18.9)	287 (21.3)	
Main person responsible for household work				<0.001
No, n (%)	715 (24.0)	542 (33.3)	173 (12.9)	
Yes, n (%)	792 (26.6)	262 (16.1)	530 (39.4)	
Equal distribution between partners, n (%)	993 (33.4)	579 (35.6)	414 (30.8)	
Lives alone, n (%)	473 (15.9)	244 (15.0)	229 (17.0)	
Average domestic stress level (scale 1-10, 10=maximum), mean (SD)	3.35 (2.19)	3.04 (2.00)	3.72 (2.35)	<0.001
Main responsibility for childcare/care of family members (scale 1-6), mean (SD)	1.77 (2.18)	1.65 (2.09)	1.92 (2.28)	<0.001
Masculinity as assessed by BEM scale (scale 1-7, 7=maximum)	4.93 (0.96)	4.98 (0.96)	4.86 (0.95)	<0.001
Defend their own opinion, mean (SD)	5.45 (1.39)	5.43 (1.38)	5.48 (1.42)	0.360
Has leadership qualities, mean (SD).	5.00 (1.52)	5.18 (1.46)	4.78 (1.57)	<0.001
Is independent, mean (SD)	5.65 (1.40)	5.60 (1.41)	5.70 (1.39)	0.064
Is willing to take risks, mean (SD)	4.42 (1.62)	4.57 (1.61)	4.23 (1.62)	<0.001
Is positive, mean (SD)	5.51 (1.39)	5.50 (1.39)	5.53 (1.40)	0.550
Is assertive, mean (SD)	5.23 (1.32)	5.27 (1.30)	5.19 (1.35)	0.140
Has a strong personality, mean (SD)	5.37 (1.32)	5.39 (1.31)	5.35 (1.35)	0.460
Is ready to take a stand, mean (SD)	5.43 (1.33)	5.51 (1.30)	5.34 (1.36)	<0.001
Is energetic, mean (SD)	4.81 (1.54)	4.83 (1.52)	4.79 (1.57)	0.420
Is aggressive, mean (SD)	2.45 (1.43)	2.59 (1.46)	2.27 (1.37)	<0.001
Self-assessment of gender identity (scale 1-7, 1=only masculine traits, 7=only feminine traits), mean (SD)	3.77 (2.11)	2.33 (1.46)	5.52 (1.32)	<0.001

Supplementary Table 3: Sociocultural and socioeconomic characteristics of the total study population stratified by sex. SD, standard deviation. P-values are reported for comparison between women and men.

Acute COVID-19 disease characteristics	Overall n=3005	Men n=1648	Women n=1357	p-value
Disease severity				
Outpatient, n (%)	2401 (79.9)	1238 (75.1)	1163 (85.7)	<0.001
Hospital admission, n (%)	604 (20.1)	410 (24.9)	194 (14.3)	
Normal ward hospitalization, n (%)	368 (12.2)	232 (14.1)	136 (10.0)	
ICU or IMC hospitalization, n (%)	236 (7.9)	178 (10.8)	58 (4.3)	
Length of ICU stay (days), median (IQR)	10 (4, 19) [n=221]	11 (4, 21) [n=169]	8 (3, 16) [n=52]	0.125
Length of hospital stay (days), median (IQR)	9 (4, 18) [n=567]	9 (5, 20) [n=386]	8 (4, 14) [n=181]	0.003
Hospital readmission during follow-up, n (%)	88/528 (16.7)	57/349 (16.3)	31/179 (17.3)	0.773
Critical illness (primary outcome)				
Critical illness, n (%)	263 (8.8)	195 (11.8)	68 (5.0)	<0.001
Death, n (%)	69 (2.3)	56 (3.4)	13 (1.0)	<0.001
Admission to ICU/IMC, n (%)	236 (7.9)	178 (10.8)	58 (4.3)	<0.001
Mechanical ventilation support, n (%)	187 (6.2)	142 (8.6 %)	45 (3.3)	<0.001
Symptoms at presentation for acute COVID-19				
Average number of symptoms, mean (SD)	4.3 (2.1)	4.0 (2.0)	4.6 (2.1)	<0.001
Physical weakness, n (%)	2187 (72.8)	1131 (68.6)	1056 (77.8)	<0.001
Fatigue, n (%)	1920 (63.9)	1003 (60.9)	917 (67.6)	<0.001
Smell and taste changes, n (%)	1856 (61.8)	915 (55.5)	941 (69.3)	<0.001
Fever, n (%)	1599 (53.2)	932 (56.6)	667 (49.2)	<0.001
Headache, n (%)	1565 (52.1)	757 (45.9)	808 (59.5)	<0.001
Cough, n (%)	1439 (47.9)	798 (48.4)	641 (47.2)	0.520
Dyspnoea/lower respiratory symptoms, n (%)	788 (26.2)	400 (24.3)	388 (28.6)	0.007
Gastrointestinal symptoms, n (%)	616 (20.5)	277 (16.8)	339 (25.0)	<0.001
Muscosceletal symptoms, n (%)	366 (12.2)	166 (10.1)	200 (14.7)	<0.001
ENT, n (%)	267 (8.9)	98 (5.9)	169 (12.5)	<0.001
Neurological symptoms, n (%)	129 (4.3)	39 (2.4)	90 (6.6)	<0.001
Cardiovascular symptoms, n (%)	76 (2.5)	37 (2.2)	39 (2.9)	0.270
Dermatologic symptoms, n (%)	15 (0.5)	5 (0.3)	10 (0.7)	0.093
Psychiatric symptoms, n (%)	12 (0.4)	8 (0.5)	4 (0.3)	0.410
Other, n (%)	13 (0.4)	7 (0.4)	6 (0.4)	0.940
COVID-19 medical treatment*	**n=604**	**n=410**	**n=194**	
Corticosteroids, n (%)	240 (39.7)	178 (43.4)	62 (32.0)	0.007
Chloroquine/Hydroxychloroquine, n (%)	145 (24.0)	102 (24.9)	43 (22.2)	0.470
Remdesivir, n (%)	143 (23.7)	108 (26.3)	35 (18.0)	0.025
Ritonavir/Lopinavir, n (%)	87 (14.4)	60 (14.6)	27 (13.9)	0.810
Tocilizumab, n (%)	48 (7.9)	37 (9.0)	11 (5.7)	0.150
Convalescent plasma, n (%)	26 (4.3)	20 (4.9)	6 (3.1)	0.310
Immunoglobulins, n (%)	2 (0.3)	2 (0.5)	0 (0.0)	N/A
Extracorporeal cytokine adsorption or plasma exchange therapy, n (%)	2 (0.3)	2 (0.5)	0 (0.0)	N/A
Other, n (%)	82 (13.6)	56 (13.7)	26 (13.4)	0.93
Organ support during acute disease*	**n=604**	**n=410**	**n=194**	
Any respiratory support, n (%)	254 (42.1)	171 (41.7)	83 (42.8)	0.802
Circulatory support, n (%)#	160 (26.5)	123 (30.0)	37 (19.1)	0.004
Renal replacement therapy, n (%)	39 (6.5)	33 (8.1)	6 (3.1)	0.021

Supplementary Table 4: Characteristics of acute COVID-19 illness in the total study population stratified by sex. P-values are reported for comparison between women and men. IQR, interquartile range; ICU, intensive care unit; IMC, intermediate care; ENT, ear nose throat, *data available only in hospitalized patients; #comprising Impella, extracorporeal membrane oxygenation (ECMO) or vasoactive medication.