Tables:

Table S1: Summary of the sample characteristics by Covid-19 (n = 1592)

Characteristics	Overall	Covid-19 N = 302	No Covid-19 N = 1290
Multimorbidity	4.77 (2.78)	4.78 (2.89)	4.67 (2.77)
Gender			
Male	678 (43%)	130 (43%)	548 (42%)
Female	914 (57%)	172 (57%)	742 (58%)
Age			
50-59	543 (34%)	140 (46%)	403 (31%)
60-69	481 (30%)	96 (32%)	385 (30%)
>69	568 (36%)	66 (22%)	502 (39%)
Disability			
Yes	282 (18%)	54 (18%)	228 (18%)
No	1,307 (82%)	247 (82%)	1,060 (82%)
Education			
No	206 (13%)	30 (9.9%)	176 (14%)
Primary	625 (39%)	124 (41%)	501 (39%)
Secondary	468 (29%)	95 (31%)	373 (29%)
University	291 (18%)	53 (18%)	238 (18%)
Fruits and Vegetables			
One per week or less	145 (9.1%)	33 (11%)	112 (8.7%)
4 times per week	469 (29%)	91 (30%)	378 (29%)
One per day	422 (27%)	74 (25%)	348 (27%)
Two or more per day	556 (35%)	104 (34%)	452 (35%)
Physical Activity			
Never	479 (30%)	93 (31%)	386 (30%)
One per month or less	97 (6.1%)	20 (6.6%)	77 (6.0%)
Several times per week	508 (32%)	105 (35%)	403 (31%)
All days	508 (32%)	84 (28%)	424 (33%)
Alcohol Consumption			
Never	648 (41%)	116 (38%)	532 (41%)
One per month or less	106 (6.7%)	20 (6.6%)	86 (6.7%)
One per week or less	339 (21%)	85 (28%)	254 (20%)
Several times per week	499 (31%)	81 (27%)	418 (32%)
Tobacco Consumption			
Neither smokes nor has smoked	701 (44%)	123 (41%)	578 (45%)

Used to smoke	631 (40%)	142 (47%)	489 (38%)
1-10 cigarettes	149 (9.4%)	22 (7.3%)	127 (9.8%)
>10 cigarettes	111 (7.0%)	15 (5.0%)	96 (7.4%)
Job Situation			
Active	403 (25%)	106 (35%)	297 (23%)
Retiree	730 (46%)	112 (37%)	618 (48%)
Unemployed	144 (9.0%)	36 (12%)	108 (8.4%)
Domestic Work	309 (19%)	47 (16%)	262 (20%)
Income			
<600€	122 (7.7%)	28 (9.3%)	94 (7.3%)
601€-900€	309 (19%)	44 (15%)	265 (21%)
901€-1200€	343 (22%)	73 (24%)	270 (21%)
1201€-1800€	334 (21%)	69 (23%)	265 (21%)
>1800€	300 (19%)	62 (21%)	238 (18%)
No answer	184 (12%)	26 (8.6%)	158 (12%)
SF12 (Physical)	39.18 (6.44)	38.95 (6.41)	39.80 (5.90)
SF12 (Mental)	43.34 (6.95)	43.31 (6.96)	43.82 (6.13)
Administrative Region			
Cadiz Bay (Ref)	196 (12%)	37 (12%)	159 (12%)
Jerez and Rural	631 (40%)	123 (41%)	508 (39%)
Gibraltar Zone	190 (12%)	39 (13%)	151 (12%)
Northwest Coast	199 (12%)	34 (11%)	165 (13%)
La Janda	180 (11%)	33 (11%)	147 (11%)
Cadiz Mountains	196 (12%)	36 (12%)	160 (12%)
Primary Attention Visit			
Yes	1,239 (78%)	235 (78%)	1,004 (78%)
No	353 (22%)	67 (22%)	286 (22%)
Emergencies Visit			
Yes	535 (34%)	103 (34%)	432 (33%)
No	1,057 (66%)	199 (66%)	858 (67%)
Hospital Admission			
Yes	170 (11%)	30 (9.9%)	140 (11%)
No	1,422 (89%)	272 (90%)	1,150 (89%)
Specialist Visit			
Yes	808 (51%)	145 (48%)	663 (51%)
No	784 (49%)	157 (52%)	627 (49%)

Table S2: Factorial Structure of the SF-12 Scale

Questions	Subscale of SF-36	D1 (PCS)	D2 (MCS)
PF02	Physical Functioning	**0.77**	0.19
PF03		**0.72**	0.18
RP2	Role Physical	**0.73**	0.20
RP3		**0.73**	0.24
BP2	Bodily Pain	**-0.73**	-0.29
GH1	General Health	**-0.55**	-0.28
VT2	Vitality	**-0.48**	**-0.42**
SF2	Social Functioning	**0.45**	**0.48**
RE2	Role Emotional	0.14	**0.82**
RE3		0.18	**0.77**
MH3	Mental Health	-0.24	**-0.47**
MH4		0.28	**0.66**
Eigenvalues		3.63	2.66
Variance Explained		32.25	25.42

Table S3: Summary of the prevalence of chronic conditions in each class (n = 1592)

Characteristics	Overall N = 1592	C1 N = 448	C2 N = 659	C3 N = 247	C4 N = 76	C5 N = 162
High blood pressure	792 (50%)	56 (12%)	485 (74%)	99 (40%)	26 (34%)	126 (78%)
Heart attack	70 (4.4%)	2 (0.4%)	43 (6.5%)	1 (0.4%)	1 (1.3%)	23 (14%)
Angina	56 (3.5%)	0 (0%)	33 (5.0%)	0 (0%)	1 (1.3%)	22 (14%)
Other heart problems	171 (11%)	13 (2.9%)	78 (12%)	8 (3.2%)	3 (3.9%)	69 (43%)
Varicose veins	324 (20%)	67 (15%)	96 (15%)	63 (26%)	37 (49%)	61 (38%)
Arthrosis	590 (37%)	119 (27%)	144 (22%)	148 (60%)	45 (59%)	134 (83%)
Cervical back pain	515 (32%)	69 (15%)	42 (6.4%)	247 (100%)	52 (68%)	105 (65%)
Lumbar back pain	578 (36%)	89 (20%)	82 (12%)	245 (99%)	59 (78%)	103 (64%)
Chronic allergy or dermatitis	347 (22%)	143 (32%)	61 (9.3%)	62 (25%)	23 (30%)	58 (36%)
Asthma	108 (6.8%)	32 (7.1%)	21 (3.2%)	19 (7.7%)	5 (6.6%)	31 (19%)
EPOC	113 (7.1%)	20 (4.5%)	41 (6.2%)	10 (4.0%)	5 (6.6%)	37 (23%)
Diabetes	299 (19%)	3 (0.7%)	189 (29%)	26 (11%)	2 (2.6%)	79 (49%)
Stomach ulcer	75 (4.7%)	35 (7.8%)	10 (1.5%)	17 (6.9%)	5 (6.6%)	8 (4.9%)
Urinary incontinence	145 (9.1%)	19 (4.2%)	44 (6.7%)	21 (8.5%)	20 (26%)	41 (25%)
High cholesterol	608 (38%)	138 (31%)	252 (38%)	85 (34%)	15 (20%)	118 (73%)
Cataracts	278 (17%)	36 (8.0%)	118 (18%)	30 (12%)	11 (14%)	83 (51%)
Chronic skin problems	154 (9.7%)	57 (13%)	39 (5.9%)	27 (11%)	14 (18%)	17 (10%)
Chronic constipation	117 (7.3%)	33 (7.4%)	6 (0.9%)	29 (12%)	24 (32%)	25 (15%)
Depression	215 (14%)	37 (8.3%)	23 (3.5%)	19 (7.7%)	75 (99%)	61 (38%)
Anxiety	219 (14%)	50 (11%)	24 (3.6%)	27 (11%)	69 (91%)	49 (30%)
Ictus	46 (2.9%)	4 (0.9%)	17 (2.6%)	3 (1.2%)	2 (2.6%)	20 (12%)
Chronic headache	209 (13%)	84 (19%)	10 (1.5%)	46 (19%)	33 (43%)	36 (22%)
Hemorrhoids	213 (13%)	73 (16%)	41 (6.2%)	35 (14%)	21 (28%)	43 (27%)
Malignant tumor	88 (5.5%)	45 (10%)	17 (2.6%)	8 (3.2%)	2 (2.6%)	16 (9.9%)
Ostheoporosis	132 (8.3%)	62 (14%)	4 (0.6%)	18 (7.3%)	14 (18%)	34 (21%)
Thyroid problem	208 (13%)	80 (18%)	35 (5.3%)	43 (17%)	6 (7.9%)	44 (27%)
Kidney problem	93 (5.8%)	27 (6.0%)	23 (3.5%)	9 (3.6%)	8 (11%)	26 (16%)
Prostate problem	141 (8.9%)	43 (9.6%)	50 (7.6%)	18 (7.3%)	7 (9.2%)	23 (14%)
Menopause problem	82 (5.2%)	51 (11%)	6 (0.9%)	10 (4.0%)	9 (12%)	6 (3.7%)
Accident injury	128 (8.0%)	37 (8.3%)	37 (5.6%)	18 (7.3%)	21 (28%)	15 (9.3%)
Obesity	438 (28%)	54 (12%)	234 (36%)	67 (27%)	25 (33%)	58 (36%)

Table S4: Summary of the sample characteristics by multimorbidity pattern (n = 1592)

Characteristics	C1, N = 448 (28%)	C2, N = 659 (41%)	C3, N = 247 (16%)	C4, N = 76 (5%)	C5, N = 162 (10%)
Multimorbidity	3.47 (1.52)	3.51 (1.51)	5.94 (2.05)	8.49 (2.64)	9.80 (2.46)
SF12 (Physical)	40.49 (5.67)	39.57 (5.96)	38.21 (6.83)	39.30 (7.48)	35.32 (7.45)
SF12 (Mental)	43.84 (6.62)	44.21 (6.19)	43.18 (7.23)	38.28 (8.42)	40.96 (8.02)
Administrative Region					
Cadiz Bay	64 (14%)	78 (12%)	30 (12%)	9 (12%)	15 (9.3%)
Jerez and Rural	174 (39%)	269 (41%)	88 (36%)	28 (37%)	72 (44%)
Gibraltar Zone	60 (13%)	73 (11%)	31 (13%)	11 (14%)	15 (9.3%)
Northwest Coast	56 (12%)	73 (11%)	38 (15%)	9 (12%)	23 (14%)
La Janda	42 (9.4%)	87 (13%)	26 (11%)	9 (12%)	16 (9.9%)
Cadiz Mountains	52 (12%)	79 (12%)	34 (14%)	10 (13%)	21 (13%)
Gender					
Male	149 (33%)	377 (57%)	89 (36%)	18 (24%)	45 (28%)
Female	299 (67%)	282 (43%)	158 (64%)	58 (76%)	117 (72%)
Age					
50-59	211 (47%)	172 (26%)	101 (41%)	38 (50%)	21 (13%)
60-69	131 (29%)	204 (31%)	85 (34%)	19 (25%)	42 (26%)
>69	106 (24%)	283 (43%)	61 (25%)	19 (25%)	99 (61%)
Disability					
Yes	59 (13%)	86 (13%)	66 (27%)	18 (24%)	53 (33%)
No	389 (87%)	573 (87%)	180 (73%)	58 (76%)	107 (66%)
Education					
No	38 (8.5%)	87 (13%)	24 (9.7%)	12 (16%)	45 (28%)
Primary	160 (36%)	245 (37%)	116 (47%)	30 (39%)	74 (46%)
Secondary	152 (34%)	189 (29%)	77 (31%)	23 (30%)	27 (17%)
University	98 (22%)	136 (21%)	30 (12%)	11 (14%)	16 (9.9%)
Fruits and Vegetables					
One per week or less	37 (8.3%)	61 (9.3%)	24 (9.7%)	7 (9.2%)	16 (9.9%)
4 times per week	116 (26%)	195 (30%)	73 (30%)	28 (37%)	57 (35%)
One per day	121 (27%)	180 (27%)	70 (28%)	12 (16%)	39 (24%)
Two or more per day	174 (39%)	223 (34%)	80 (32%)	29 (38%)	50 (31%)
Physical Activity					
Never	108 (24%)	173 (26%)	84 (34%)	39 (51%)	75 (46%)
One per month or less	24 (5.4%)	40 (6.1%)	19 (7.7%)	7 (9.2%)	7 (4.3%)
Several times per week	168 (38%)	210 (32%)	77 (31%)	14 (18%)	39 (24%)

All days	148 (33%)	236 (36%)	67 (27%)	16 (21%)	41 (25%)
Alcohol Consumption					
Never	172 (38%)	217 (33%)	110 (45%)	50 (66%)	99 (61%)
One per month or less	28 (6.2%)	38 (5.8%)	19 (7.7%)	6 (7.9%)	15 (9.3%)
One per week or less	108 (24%)	143 (22%)	54 (22%)	11 (14%)	23 (14%)
Several times per week	140 (31%)	261 (40%)	64 (26%)	9 (12%)	25 (15%)
Smoke					
Neither smokes nor has smoked	195 (44%)	296 (45%)	87 (35%)	35 (46%)	88 (54%)
Used to smoke	175 (39%)	265 (40%)	112 (45%)	22 (29%)	57 (35%)
1-10 cigarettes	51 (11%)	55 (8.3%)	24 (9.7%)	13 (17%)	6 (3.7%)
>10 cigarettes	27 (6.0%)	43 (6.5%)	24 (9.7%)	6 (7.9%)	11 (6.8%)
Job					
Active	144 (32%)	161 (24%)	69 (28%)	18 (24%)	11 (6.8%)
Retiree	158 (35%)	355 (54%)	90 (36%)	29 (38%)	98 (60%)
Unemployed	54 (12%)	49 (7.4%)	28 (11%)	7 (9.2%)	6 (3.7%)
Domestic Work	91 (20%)	91 (14%)	58 (23%)	22 (29%)	47 (29%)
Income					
<600€	30 (6.7%)	41 (6.2%)	18 (7.3%)	17 (22%)	16 (9.9%)
601€-900€	73 (16%)	122 (19%)	47 (19%)	15 (20%)	52 (32%)
901€-1200€	97 (22%)	113 (17%)	76 (31%)	18 (24%)	39 (24%)
1201€-1800€	108 (24%)	143 (22%)	43 (17%)	15 (20%)	25 (15%)
>1800€	100 (22%)	148 (22%)	29 (12%)	6 (7.9%)	17 (10%)
No answer	40 (8.9%)	92 (14%)	34 (14%)	5 (6.6%)	13 (8.0%)
COVID-19					
Yes	77 (17%)	127 (19%)	53 (21%)	15 (20%)	30 (19%)
No	371 (83%)	532 (81%)	194 (79%)	61 (80%)	132 (81%)
COVID-19 Sequelae					
Yes	17 (22%)	21 (17%)	12 (23%)	6 (40%)	8 (27%)
No	60 (78%)	106 (83%)	41 (77%)	9 (60%)	22 (73%)
Primary Attention Visit					
Yes	334 (75%)	485 (74%)	208 (84%)	68 (89%)	144 (89%)
No	114 (25%)	174 (26%)	39 (16%)	8 (11%)	18 (11%)
Emergencies Visit					
Yes	132 (29%)	183 (28%)	99 (40%)	36 (47%)	85 (52%)
No	316 (71%)	476 (72%)	148 (60%)	40 (53%)	77 (48%)
Hospital Admission					
Yes	35 (7.8%)	60 (9.1%)	30 (12%)	10 (13%)	35 (22%)

No	413 (92%)	599 (91%)	217 (88%)	66 (87%)	127 (78%)
Specialist Visit					
Yes	242 (54%)	280 (42%)	134 (54%)	50 (66%)	102 (63%)
No	206 (46%)	379 (58%)	113 (46%)	26 (34%)	60 (37%)

COVID-19 by Multimorbidity Pattern

$\chi^2_{Pearson}(4) = 2.01$, $p = 0.73$, $\widehat{V}_{Cramer} = 0.00$, $CI_{95\%}$ [0.00, 1.00], $n_{obs} = 1{,}592$
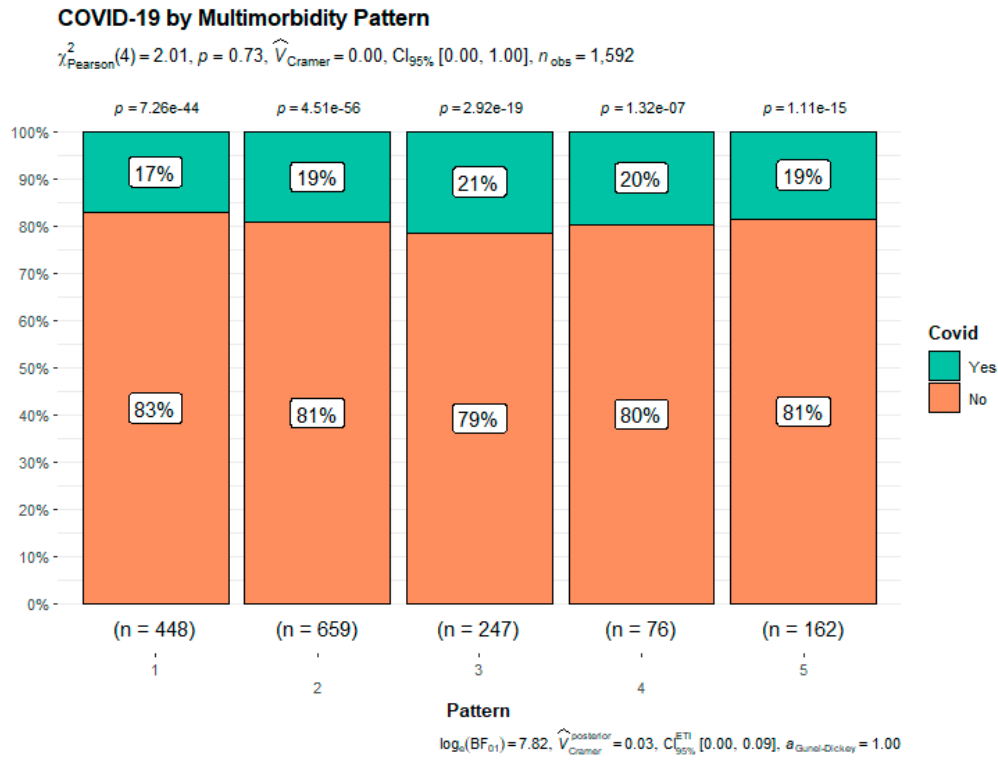

Figure S1: COVID-19 by Multimorbidity Pattern

Sequelae COVID-19 by Multimorbidity Pattern

$\chi^2_{\text{Pearson}}(4) = 5.47$, $p = 0.24$, $\widehat{V}_{\text{Cramer}} = 0.07$, $CI_{95\%}$ [0.00, 1.00], $n_{\text{obs}} = 302$

$p = 9.57e\text{-}07$ $p = 4.61e\text{-}14$ $p = 6.79e\text{-}05$ $p = 0.44$ $p = 0.01$

$\log_e(BF_{01}) = 3.01$, $\widehat{V}^{\text{posterior}}_{\text{Cramer}} = 0.13$, $CI^{\text{ETI}}_{95\%}$ [0.00, 0.26], $a_{\text{Gunel-Dickey}} = 1.00$
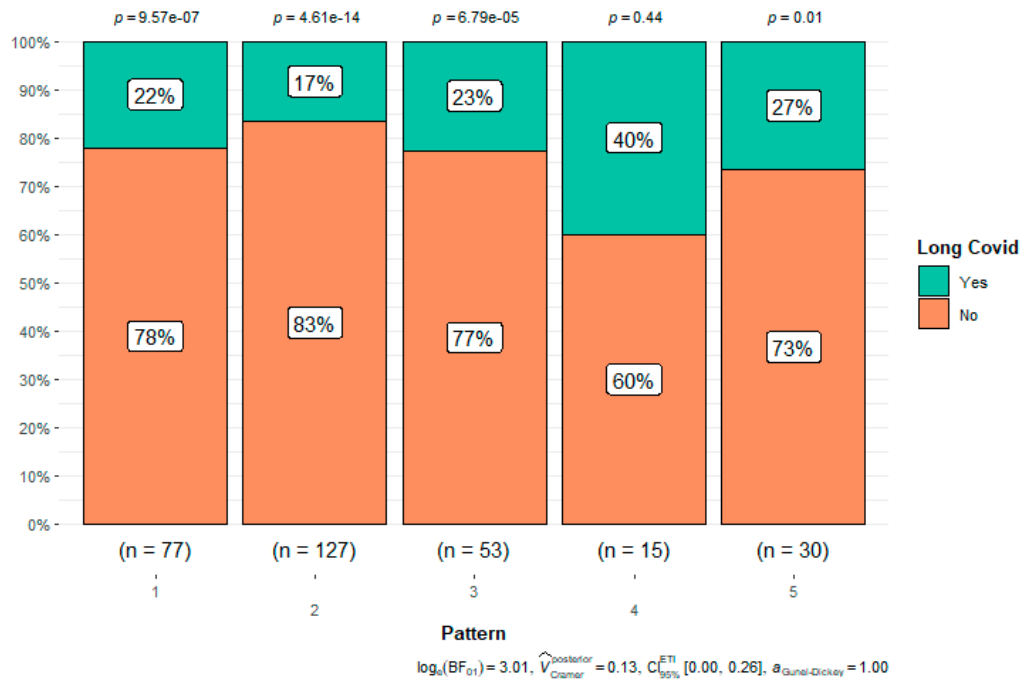
Figure S2: Sequelae COVID-19 by Multimorbidity Pattern