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SUPPLEMENTARY MATERIAL

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Knowledge and perceptions regarding pulmonary rehabilitation amongst Ecuadorian physicians following COVID-19 outbreak

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Table S1. Percentages and frequencies of participants who “answered correctly” and “answered incorrectly” on each of the questions per domain.

| Domin | Question | Answered correctly % (n) | Answered incorrectly % (n) | Chi-Square | p value |
|---|--|--------------------------|----------------------------|------------|---------|
| Follow-up after COVID-19 pneumonia | Q1: Follow up of hospitalized COVID-19 patients should include measures of respiratory function at 12 weeks following hospital discharge. Correct answer: "True" | 81.4 (240) | 18.6 (55) | 116.017 | .000 |
| | Q2: COVID-19 infected individuals should be measured for exercise capacity at 12 weeks' follow-up after hospital discharge. Correct answer: "True" | 78.0 (230) | 22.0 (65) | 92.288 | .000 |
| | Q3: Radiological features in community acquired pneumonia are followed-up sooner than that for COVID 19 pneumonia after hospital discharge. Correct answer: "True" | 43.4 (128) | 56.6 (167) | 5.156 | .023 |
| | Q4: There are specific guidelines to follow up for rehabilitation after hospitalization for COVID-19 infection, according to the severity of the disease. Correct answer: "False" | 18.3 (54) | 81.7 (241) | 118.539 | .000 |
| Goals of pulmonary rehabilitation | Q5: The short-term goal of pulmonary rehabilitation is to improve dyspnea. Correct answer: "True" | 84.1 (248) | 15.9 (47) | 136.953 | .000 |
| | Q6: The long-term goal of pulmonary rehabilitation is to improve patient's quality of life after COVID-19 infection. Correct answer: "True" | 98.3 (290) | 1.7 (5) | 275.339 | .000 |
| Benefits of pulmonary rehabilitation | Q7: Does pulmonary rehabilitation provide, in general, any benefit in patients with past COVID-19 infection? Correct answer: "Yes" | 93.6 (276) | 6.4 (19) | 223.895 | .000 |
| | Q8: Does pulmonary rehabilitation provide, in general, a reduction in morbidity in patients with past COVID-19 infection? Correct answer: "Yes" | 87.1 (257) | 12.9 (38) | 162.580 | .000 |
| | Q9: Does pulmonary rehabilitation reduce morbidity in COVID-19 infected patients that are asymptomatic? Correct answer: "No" | 0.0 (0) | 100.0 (295) | N/A | N/A |
| | Q10: Does pulmonary rehabilitation reduce morbidity in patients whose COVID-19 infection is mild? Correct answer: "No" | 0.0 (0) | 100.0 (295) | N/A | N/A |
| | Q11: Does pulmonary rehabilitation reduce morbidity in patients whose COVID-19 infection is moderate? Correct answer: "Yes" | 78.0 (230) | 22.0 (65) | 92.288 | .000 |
| | Q12: Does pulmonary rehabilitation reduce morbidity in patients whose COVID-19 infection is severe? Correct answer: "Yes" | 74.9 (221) | 25.1 (74) | 73.251 | .000 |
| Indications of pulmonary rehabilitation | Q13: Complementary tests are useful to determine if a patient with past COVID-19 infection requires pulmonary rehabilitation. Correct answer: "Yes" | 99.0 (292) | 1.0 (3) | 283.122 | .000 |
| | Q14: Spirometry is useful to determine if a patient with past COVID-19 infection requires pulmonary rehabilitation. Correct answer: "Yes" | 83.4 (246) | 16.6 (49) | 131.556 | .000 |
| | Q15: The DLCO measurement is useful to determine if a patient with past COVID-19 infection requires pulmonary rehabilitation. Correct answer: "Yes" | 25.1 (74) | 74.9 (221) | 73.251 | .000 |

| Domin | Question | Answered correctly % (n) | Answered incorrectly % (n) | Chi-Square | p value |
|---|---|--------------------------|----------------------------|------------|---------|
| | Q16: The 6-MWT is useful to determine if a patient with past COVID-19 infection requires pulmonary rehabilitation. Correct answer: "Yes" | 59.7 (176) | 40.3 (119) | 11.014 | .001 |
| | Q17: The MIP is useful to determine if a patient with past COVID-19 infection requires pulmonary rehabilitation. Correct answer: "Yes" | 34.9 (103) | 65.1 (192) | 26.851 | .000 |
| | Q18: The MEP is useful to determine if a patient with past COVID-19 infection requires pulmonary rehabilitation. Correct answer: "Yes" | 32.5 (96) | 67.5 (199) | 35.963 | .000 |
| | Q19: Patients whose COVID-19 infection is moderate or severe should receive pulmonary rehabilitation until 12 weeks after hospital discharge. Correct answer: "True" | 87.1 (257) | 12.9 (38) | 162.580 | .000 |
| | Q20: Associated pulmonary or neuromuscular comorbidity warrants physiotherapy for airway clearance even in mild COVID-19 patients. Correct answer: "True" | 74.9 (221) | 25.1 (74) | 73.251 | .000 |
| | Q21: Pulmonary rehabilitation referral is not indicated for airway clearance in a mild COVID-19 patient and no significant respiratory compromise. Correct answer: "True" | 52.5 (155) | 47.5 (140) | 0.763 | .382 |
| | Q22: Hospitalized COVID-19 patients should receive rehabilitation at the bedside until safe for discharge to the home environment. Correct answer: "True" | 70.2 (207) | 29.8 (88) | 48.003 | .000 |
| | Q23: In inpatient pulmonary rehabilitation, focused pulmonary assessment needs to be conducted. Correct answer: "True" | 65.1 (192) | 34.9 (103) | 26.851 | .000 |
| | Q24: Pulmonary rehabilitation is administered by an interdisciplinary team. Correct answer: "True" | 88.1 (260) | 11.9 (35) | 171.610 | .000 |
| Procedure and administration of pulmonary rehabilitation | <i>Remote pulmonary rehabilitation</i> Q25: The recommended goal of remote pulmonary rehabilitation is 2-3 on the Borg dyspnea scale score or mild to moderate breathlessness with exercise. Correct answer: "True" | 53.9 (159) | 46.1 (136) | 1.793 | .181 |
| | Q26: Pulmonary rehabilitation in COVID-19 survivors can be done at home with appropriate tools. Correct answer: "True" | 79.7 (235) | 20.3 (60) | 103.814 | .000 |
| | Q27: For remote pulmonary rehabilitation, various exercises are recommended multiple times a week for COVID-19 patients. Correct answer: "Yes" | 74.6 (220) | 25.4 (75) | 71.271 | .000 |

Notes: All data are presented as percentages and frequencies. Differences between observed and expected values are significant at .05 significance level. N/A, not applicable as variable is constant.

Table S2. Correlation between specialty and years of experience on number of correct answers overall and per domain.

| Domain | Specialist "Yes" | p value | Years of experience | p value |
|--|------------------|---------|---------------------|---------|
| | rpb | | r | |
| Follow-up after COVID-19 pneumonia | -.040 | .490 | .005 | .960 |
| Goals of pulmonary rehabilitation | .081 | .167 | .080 | .379 |
| Benefits of pulmonary rehabilitation | .010 | .862 | .137 | .131 |
| Indications of pulmonary rehabilitation | .056 | .338 | .024 | .789 |
| Procedure and administration of pulmonary rehabilitation | -.029 | .615 | -.069 | .446 |
| Overall (all domains) | .022 | .708 | .032 | .726 |

Notes: All data are presented as correlation coefficients. Correlation coefficients are significant at .05 significance level. rpb, point biserial correlation coefficient; r, Pearson correlation coefficient.