**Supplementary Table 1.** Respondents’ personal experience during the COVID-19 epidemic by location

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Personal experience § | Total (n=2669) | Wuhan (n=267) | Hubei excluding Wuhan (n=98) | Others (n=2304) | *P* value |
| Participation in anti-epidemic activities |  |  |  |  | 0.003 |
| No | 1907 (71.4) | 212 (79.4) **a** | 62 (63.3) **b** | 1633 (70.9) **b** |  |
| Yes | 762 (28.6) |  55 (20.6) **a** | 36 (36.7) **b** | 671 (29.1) **b** |  |
| Current Status of orthodontic practice |  |  |  |  | < 0.001**¶** |
| Not resumed yet | 849 (31.8) | 249 (93.3) **a** | 51 (52.0) **b** | 549 (23.8) **c** |  |
| Resumed, less than 2 weeks | 478 (17.9) | 15 (5.6) **a** | 22 (22.4) **b** | 441 (19.1) **b** |  |
| Resumed, 2 to 4 weeks | 725 (27.2) | 2 (0.7) **a** | 16 (16.3) **b** | 707 (30.7) **c** |  |
| Resumed, more than 4 weeks | 611 (22.9) | 1 (0.4) **a** | 9 (9.2) **b** | 601 (26.1) **c** |  |
| No suspension | 6 (0.2) | 0 (0.0) **a** | 0 (0.0) **a** | 6 (0.3) **a** |  |
| Completion of COVID-19 related training program |  |  |  |  | 0.001 |
| No | 553 (20.7) | 78 (29.2) **a** | 19 (19.4) **a, b** | 456 (19.8) **b** |  |
| Yes | 2116 (79.3) | 189 (70.8) **a** | 79 (80.6) **a, b** | 1848 (80.2) **b** |  |
| Experience of treating or caring for COVID-19 patients |  |  |  |  | < 0.001 |
| No | 2564 (96.1) | 243 (91.0) **a** | 89 (90.8) **a** | 2232 (96.9) **b** |  |
| Yes | 105 (3.9) | 24 (9.0) **a** | 9 (9.2) **a** | 72 (3.1) **b** |  |

**§** Displayed as N (%)

**¶** Fisher’ exact test

**a, b, c**: groups with the same letters in the same row are not statistically different (*P* > 0.05) according to *post hoc* tests

**Supplementary Table 2.** Respondents’ COVID-19 related knowledge by profession

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Questions about knowledge** | **Total (n=2669)** | **Orthodontists (n=1731)** | **Orthodontic residents (n=547)** | **Orthodontic nurses (n=391)** | ***P* value ¶** |
| Self-perceived level of knowledge **§** | 4.03 (0.65) | 4.07 (0.64) **a** | 3.80 (0.64) **b** | 4.16 (0.65) **c** | **< 0.001** |
| 17. You understand the relevant knowledge of COVID-19  | 4 (4 – 4) | 4 (4 – 5) **a** | 4 (3 – 4)**b** | 4 (4 – 5)**a** | **< 0.001** |
| 19. You are confident that you understand the risks of COVID-19 epidemic for patients and HCWs | 4 (4 – 5) | 4 (4 – 5)**a** | 4 (4 – 4)**b** | 4 (4 – 5)**a** | **< 0.001** |
| 20. You are confident that you understand how to protect yourself and your patients during COVID-19 epidemic | 4 (4 – 4) | 4 (4 – 4)**a** | 4 (3 – 4)**b** | 4 (4 – 5)**c** | **< 0.001** |
| Total knowledge score **§** | 2.74 (0.85) | 2.75 (0.85) | 2.73 (0.85) | 2.74 (0.86) | 0.887 |
| 21. What is the correct PPE | 51 (1.9) | 30 (1.7) | 13 (2.4) | 8 (2.0) | 0.618  |
| 22. Hand hygiene includes either washing hands with soap and water, or the use of an alcohol-based hand rub | 2347 (87.9) | 1534 (88.6)**a** | 491 (89.8)**a** | 322 (82.4)**b** | **0.001**  |
| 23. It is adequate to use an alcohol-based hand rub if the hands are visibly soiled | 1086 (40.7) | 718 (41.5)**a** | 183 (33.5)**b** | 185 (47.3) **a** | **< 0.001** |
| 24. Use of correct PPE eliminates the need for hand hygiene | 2613 (97.9) | 1698 (98.1) | 532 (97.3) | 383 (98.0) | 0.492  |
| 25. When should you wear goggles and a face shield at the same time during treatment | 259 (9.7) | 180 (10.4) | 53 (9.7) | 26 (6.6) | 0.077  |
| 26. When could you only wear a surgical mask during treatment | 958 (35.9) | 593 (34.3) **a** | 219 (40.0) **b** | 146 (37.3)**a, b** | **0.040**  |

#17, #19, #20: Displayed as median (25th percentile – 75 percentile). Likert scale, ranging from 1 (completely disagree) to 5 (completely agree)

#21 to #26: Displayed as N (%), number and percentage of correct response

**§** Displayed as mean (SD)

**¶** *P* values in bold are statistically significant (< 0.05)

**a, b, c**: groups with the same letters in the same row are not statistically different (*P* > 0.05) according to *post hoc* tests

**Supplementary Table 3.** Respondents’ attitude towards COVID-19 by profession

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Questions about attitude** | **Total (n=2669)** | **Orthodontists (n=1731)** | **Orthodontic residents (n=547)** | **Orthodontic nurses (n=391)** | ***P* value ¶** |
| 27. Use of PPE will keep orthodontic staffs from getting COVID-19  | 4 (3 – 4) | 4 (3 – 4)**a, b** | 4 (3 – 4)**a** | 4 (3 – 5)**b** | **0.010**  |
| 28. Use of PPE will keep orthodontic patients from getting COVID-19  | 4 (2 – 4) | 4 (2 – 4)**a** | 4 (2 – 4)**a** | 4 (3 – 4)**b** | **0.001**  |
| 29. It is inconvenient to use recommended PPE when treating / caring for patients  | 4 (2 – 4) | 4 (3 – 4)**a** | 3 (2 – 4)**b** | 3 (2 – 4)**b** | **< 0.001** |
| 30. Are you willing to treat / care for patients confirmed or suspected with COVID-19 if you have the opportunity  | 1711 (64.1) | 1033 (59.7)**a** | 355 (64.9)**a** | 323 (82.6)**b** | **< 0.001** |

#27 to #29: Displayed as median (25th percentile – 75 percentile). Likert scale, ranging from 1 (completely disagree) to 5 (completely agree)

#30: Displayed as N (%), number and percentage of yes response

**¶** *P* values in bold are statistically significant (< 0.05)

**a, b, c**: groups with the same letters in the same row are not statistically different (*P* > 0.05) according to *post hoc* tests.

**Supplementary Table 4.** Respondents’ COVID-19 related behaviors by profession

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Questions about behaviors §** | **Total (n=2669)** | **Orthodontists (n=1731)** | **Orthodontic residents (n=547)** | **Orthodontic nurses (n=391)** | ***P* value ¶** |
| 32. All recommended PPE is readily available in your hospital or clinic | 4 (3 – 4) | 4 (3 – 4) **a** | 4 (3 – 4) **a** | 4 (4 – 5) **b** | **< 0.001** |
| 33. Your head nurse or attending doctor would reprimand you if you did not use PPE when treating or caring for patients | 4 (4 – 5) | 4 (4 – 5) | 4 (4 – 5) | 4 (4 – 5) | 0.524  |
| 34. The estimated compliance to recommended PPE during treatment or care of patients after work resumption (%) | 100 (80 – 100) | 100 (80 – 100) **a** | 100 (80 – 100) **a** | 100 (90 – 100) **b** | **0.001**  |
| 35. You will remove your PPE immediately when you leave the treatment room | 4 (4 – 5) | 4 (4 – 5) **a** | 4 (3 – 4) **b** | 4 (4 – 5) **a** | **< 0.001** |
| 36. You often forget to change PPE between patients | 2 (2 – 3) | 2 (2 – 3) **a** | 2 (2 – 3) **a** | 2 (1 – 2) **b** | **< 0.001** |
| 37. You believe that you can improve the compliance to recommended PPE  | 4 (4 – 5) | 4 (4 – 5) **a** | 4 (4 – 4) **a** | 4 (4 – 4) **a** | **0.013**  |

**§** Displayed as median (25th percentile – 75 percentile). Likert scale, ranging from 1 (completely disagree) to 5 (completely agree)

**¶** *P* values in bold are statistically significant (< 0.05)

**a, b, c**: groups with the same letters in the same row are not statistically different (*P* > 0.05) according to *post hoc* tests.