Table 1. Participant characteristics

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| Participant characteristics | | Total n=175 |
| Trainee level | Intern  Junior resident  Senior resident  Fellow | 30 (17.1%)  73 (41.7%)  56 (32%)  16 (9.1%) |
| Program length | 1-2 years  2-5 years  >5 years | 21 (12.1%)  135 (77.6%)  18 (10.3%) |
| Region, by COVID prevalence | High COVID region (avg >100 cases per 100,000)  Low COVID region | 88 (50.3%)  87 (49.7%) |

Table 2. Educational activities and attitudes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | Strongly agree/ Agree | Neutral | Disagree/ Strongly disagree | p \* |
| My program’s didactic educational activities have increased | All | 109 (62.3%) | 28 (16%) | 38 (21.7%) |  |
| High COVID | 62 (70.5%) | 17 (19.3%) | 9 (10.2%) | **0.011** |
| Low COVID | 47 (61%) | 11 (12.6%) | 29 (33.3%) |  |
| My program has required involvement in an educational curriculum | All | 115 (65.7%) |  | 60 (34.3%) |  |
| High COVID | 66 (75%) | - | 22 (25%) | **0.035** |
| Low COVID | 49 (56%) | - | 38 (43.7%) |  |
| My department uses technology to good effect to continue with educational activities | All | 152 (86.9%) | 16 (9.1%) | 7 (4%) |  |
| High COVID | 84 (95.4%) | 4 (4.5%) | 0 | **0.011** |
| Low COVID | 68 (78.2%) | 12 (13.8%) | 7 (8%) |  |
| My ability to participate in research activities has been reduced | All | Reduced  51 (29.1%) | No impact  59 (33.9%) | Increased  61 (34.9%) |  |
| w/ clinical subjects (n=42) | 30 (71.4%) | 3 (7.1%) | 9 (21.4%) |  |
| Lab (n=14) | 10 (71.4%) | 1 (7.1%) | 3 (21.4%) |  |
|  | Non-lab and no subjects (n=127) | 37 (29.1%) | 35 (27.6%) | 55 (43.3%) |  |
| The impact of the pandemic on my education has been |  | Negative  157 (89.7%) | No impact  12 (6.9%) | Positive  6 (3.4%) |  |
| My education during the pandemic is | All | Extremely/Very Important  99 (56.6%) | Somewhat important  53 (30.3%) | Not so/Not at all important  23 (13.1%) |  |
| Junior res/Intern | 65 (63.1%) | 25 (24.3%) | 13 (12.6%) | 0.10 |
| Senior res/Fellow | 34 (47.2%) | 28 (38.9%) | 10 (13.9%) |  |
| High COVID | 58 (65.9%) | 20 (22.7%) | 10 (11.4%) | 0.072 |
| Low COVID | 41 (47.1%) | 33 (37.9%) | 14 (16.1%) |  |
| I am concerned about my ability to receive adequate **educational knowledge** related to my training | All | Strongly agree/ Agree  60 (34.3%) | Neutral  46 (26.3%) | Disagree/Strongly disagree  69 (39.4%) |  |
| Junior res/Intern | 39 (37.9%) | 28 (27.2%) | 36 (34.9%) | 0.31 |
| Senior res/Fellow | 21 (29.2%) | 18 (25%) | 33 (45.8%) |  |
| High COVID | 21 (23.8%) | 24 (27.3%) | 43 (48.9%) | **0.025** |
| Low COVID | 39 (44.8%) | 22 (25.3%) | 26 (29.9%) |  |
| I am concerned about my ability to receive adequate training in **clinical decision making** | All | 75 (42.9%) | 40 (22.9%) | 60 (34.3%) |  |
| Junior res/Intern | 51 (49.5%) | 22 (21.4%) | 20 (29.1%) | 0.10 |
| Senior res/Fellow | 24 (33.3%) | 18 (25%) | 30 (41.7%) |  |
| High COVID | 29 (32.9%) | 23 (26.1%) | 36 (40.9%) | 0.062 |
| Low COVID | 46 (52.9%) | 17 (19.5%) | 24 (27.6%) |  |
| I am concerned about my ability to receive adequate **surgical training** | All | 119 (68%) | 25 (14.3%) | 13 (17.7%) |  |
| Junior res/Intern | 73 (70.9%) | 17 (16.5%) | 13 (12.6%) | 0.10 |
| Senior res/Fellow | 46 (63.9%) | 8 (11.1%) | 18 (25%) |  |
| High COVID | 54 (61.4%) | 13 (14.8%) | 21 (23.9%) | 0.10 |
| Low COVID | 65 (74.7%) | 12 (13.8%) | 10 (11.5%) |  |

\*adjusted for FDR

Table 3. Safety and other concerns

|  |  |  |  |
| --- | --- | --- | --- |
|  | Strongly agree/Agree | Neither agree nor disagree | Disagree/ Strongly disagree |
| I feel safe and protected during my clinical duties | 133 (76%) | 26 (14.9%) | 16 (9.1%) |
| I am provided adequate PPE for the operating room (n=159) | 142 (81.1%) | 9 (5.1%) | 9 (5.1%) |
| I am provided adequate PPE for seeing patients in the ER & hospital | 144 (82.3%) | 11 (6.3%) | 16 (9.1%) |
| My department is supportive of my suggestions and feedback | 149 (85.1%) | 18 (10.3%) | 8 (4.6%) |
| I feel emotionally supported during this time | 139 (79.4%) | 26 (16.6%) | 7 (4%) |
| The pandemic has had a negative impact on my ability to secure a job or fellowship at the completion of my training (n=147) | 57 (35.3%) | 89 (60.5%) | 1 (0.6%) |
| Junior resident/Intern (n=83) | 22 (26.5%) | 61 (73.5%) | 0 |
| Senior resident/Fellow (n=64)  P<0.001 | 35 (54.7%) | 28 (43.8%) | 1 (1.6%) |
| The pandemic has impacted decisions related to my future career | 26 (14.9%) | 89 (50.9%) | 60 (34.3%) |
| Junior resident/Intern | 10 (9.7%) | 60 (58.3%) | 33 (32%) |
| Senior resident/Fellow  P=0.023 | 16 (22.2%) | 29 (40.3%) | 27 (37.5%) |
| I feel worried about | Exposure to the virus  Contracting the virus  Infecting others with the virus  Not being adequately protected  Safety of my co-workers  Hospital not being adequately equipped  Not receiving enough training before I graduate  Ability to achieve future career goals  Financial security | | 121 (70%)  125 (72.3%)  151 (87.3%)  77 (44.5%)  126 (72.8%)  75 (43.4%)  102 (59%)  76 (43.9%)  37 (21.4%) |
| I have been directly impacted by the cancelation or rescheduling of | Training courses  Conferences  Interviews  Examinations | | 104 (59%)  122 (69.7%)  29 (16.6%)  41 (23.4%) |