Effects of the SARS-CoV-2 Pandemic on the Residency Training in Orthopedics and Traumatology after nearly two years in Germany – A Nationwide Survey

A survey by the Center for Musculoskeletal Surgery (CMSC) at Charité – Universitätsmedizin Berlin

Dominik Adl Amini dominik.adl-amini@charite.de

Maximilian Muellner maximilian.muellner@charite.de

| l) | What impact did the COVID-19 | Applicable | Not to | Not |
|----|-------------------------------------|--------------|--------|------------|
| | pandemic have on your | | answer | Applicable |
| | residency training last year? | | | |
| A) | General everyday clinical practic | ce and care: | | |
| 1. | Despite the restrictions imposed | | | |
| | by the pandemic (e.g., contact | | | |
| | restrictions), were you able to | | | |
| | adequately discuss clinical | П | П | |
| | decisions regarding difficult | | | |
| | outpatient and inpatient cases | | | |
| | with your training supervisors | | | |
| | during the past year? | | | |
| 2. | Have there been regular morning | | | |
| | meetings in your department in | | | |
| | the last year with the possibility | | | |
| | of participation of the whole | | | |
| | team? (virtually or online) | | | |
| 3. | Did your department have | | | |
| | regular case discussions of the | | | |
| | patients awaiting surgery with the | п | | п |
| | possibility of participation of the | | | |
| | whole team during the last year? | | | |
| | (Indication discussion) | | | |

| 4. | Did your department hold regular case discussions of patients already operated on in the last year with the possibility of participation of the whole team? (Debriefing) | | | | | |
|-----|---|-----------------------------|--|--|--|--|
| 5. | Have you been assigned to "non-specialty" care for COVID-19 patients in other departments/ wards for a period of at least one month? | | | | | |
| 5.1 | If applicable, how many months in total you were assigned there? | Please enter quantity here: | | | | |
| 6. | Has your department had a team split of staff for at least one month in the last year? (In each case, a team of physicians released from work who can step in within the working team in the event of an infection). | | | | | |
| 7. | Were residents in your department able to complete their training last year only after a delay due to the pandemic, as no specialist examinations were offered temporarily? | | | | | |

| B) | OR | | | | | |
|-----|--|---|---------------------|---------|--|--|
| 1. | Did experienced surgeons | | | | | |
| | (specialist, senior physician, | | | | | |
| | chief) operate more frequently in | | | | | |
| | your department in the last year | | | | | |
| | due to time pressure? | | | | | |
| 2. | Have you had the opportunity to | | | | | |
| | actively participate in surgeries in | | | | | |
| | the past year? | | | | | |
| 3. | By what percentage (%) has your | | | | | |
| | training in the OR changed in the | | | | | |
| | last year? (If less: "- X%"; if more: | Ple | ease enter quantity | here: | | |
| | "+ X%"; if no reduction, please | | | | | |
| | specify "0%"!) | | | | | |
| C) | Continuing medical education: | | | , | | |
| 1. | Has there has been a change in | | | | | |
| | number of institutional | | | | | |
| | educational didactics | | | | | |
| | in your department in the last | _ | | | | |
| | year compared to the previous | | | | | |
| | year? | | | | | |
| 1.1 | If applicable, by what percentage | | | | | |
| | do you estimate these internal | | | | | |
| | didactics have changed in the | Ple | ease enter quantity | / here: | | |
| | last year? | 4 and 5 and 4 and 5 and | | | | |
| | (If less: "- X%"; if more: "+ X%"; if no | | | | | |
| 4.0 | reduction, please specify "0%"!) | | | | | |
| 1.2 | If applicable, what percentage of | | | | | |
| | these internal didactics were | | | | | |
| | cancelled without an auxiliary | Please enter quantity here: | | | | |
| | date last year? | | | | | |
| | (If less: "- X%"; if more: "+ X%"; if no | | | | | |
| | reduction, please specify "0%"!) | | | | | |

| 2. | Have you been unable to attend planned external medical education courses in the past year due to the pandemic (e.g., AE, ATLS, AO, or radiology courses)? | | | | | |
|-----|--|-----------------------------|--|--|--|--|
| 2.1 | If applicable, what percentage of these external medical education courses were cancelled last year without an auxiliary date? | Please enter quantity here: | | | | |
| D) | Medial conferences | | | | | |
| 1. | Have you attended conferences virtually in the last year? | | | | | |
| 2. | In the past year, have any conferences you wanted to attend (physical or virtual) been canceled without an auxiliary date? | | | | | |
| 3. | How many conferences were cancelled you planned to attend last year? | Please enter quantity here: | | | | |
| E) | Research | | | | | |
| 1. | Did you have the opportunity to invest time in research projects last year? | | | | | |
| 1.2 | If applicable, what percentage of your time could you invest in research projects? (If less: "- X%"; if more: "+ X%"; if no reduction, please indicate "0%"!) | Please enter quantity here: | | | | |

| 2. | Was there a change in the number of research projects that were newly developed in your department last year compared to previous years? | | | | | |
|-----|---|-----------------------------|--|--|--|--|
| 2.1 | If applicable, by what percentage did the number of research projects change? (If less: "- X%"; if more: "+ X%"; if no reduction, please specify "0%"!) | Please enter quantity here: | | | | |
| 3. | Were any ongoing studies that you were involved in paused last year due to the pandemic? | | | | | |

| II) | How do you rate the following | Totally agree | Rather agree | Neutral | Rather disagree | Totally disagree | | | |
|-----|--|---------------|--------------|---------|-----------------|------------------|--|--|--|
| | statements? | | | | | | | | |
| A) | Clinic/Surgery/Research | | | | | | | | |
| 1. | Due to the limitations of the pandemic, I was set back in time in my general training (clinical and surgical). | | | | | | | | |
| 2. | Last year, my surgical training was slowed down due to the pandemic. | | | | | | | | |
| 3. | In the last year, I have been able to advance my scientific career. | | | | | | | | |

| B) | Medial conferences | | | | | | |
|----|---|--|--|--|--|--|--|
| 1. | In general, virtual conferences are a successful substitute for physical conferences. | | | | | | |
| 2. | If I had the choice between a virtual and a physical conferences, I would prefer a virtual one. | | | | | | |
| 3. | My growth in knowledge is less at virtual conferences than at physical conferences. | | | | | | |

| III) | Give us a prospect on | Totally | Rather | Neutral | Rather | Totally |
|------|---|---------|--------|---------|----------|----------|
| | your future | agree | agree | | disagree | disagree |
| 1. | I anticipate that my residency training will probably be extended due to the pandemic. | | | | | |
| 2. | I expect to be clinically educated more extensively in the upcoming year compared to last year. | | | | | |
| 3. | I expect to receive more extensive surgical training in the upcoming year. | | | | | |

| 4. | I expect to be able to physically attend medical conferences in the coming year. | | | | _ | | | | | |
|------|--|------------|--------|---|---|---|---|---|---|----|
| | | | | | | | | | | |
| IV) | Gender | | | | | | | | | |
| 1. | female | | | | | | | | | |
| 2. | male | | | | | | | | | |
| 3. | diverse | | | | | | | | | |
| | | | | | | | | | | |
| V) | Date of birth | | | | | | | | | |
| 1. | Please enter date of birth. | (DD/MM/\ | (Y) | | | | | | | |
| | | | | | | | | | | |
| VI) | What is your current pos | sition? | | | | | | | | |
| 1. | Resident physician | | | | | | | | | |
| 2. | Specialist | | | | | | | | | |
| | | | | | | | | | | |
| VII) | In which year of your res | sidency tr | aining | 1 | 2 | 3 | 4 | 5 | 6 | >6 |
| | are you currently? | | | | | | | | | |
| | For specialists: In which board certification are ye | | | | | | | | | |
| | board certification are yo | ou r | | | | _ | | | | |
| | | | | | | | | | Ш | |
| | | | | | | | | | | |

| VIII) | In what type of facility are you currently (predominantly) employed? | | | | | |
|-------|--|--|--|--|--|--|
| | (one answer) | | | | | |
| 1. | Basic and standard care clinic | | | | | |
| 2. | Clinic with focused care | | | | | |
| 3. | Maximum care clinic/university hospital | | | | | |
| 4. | Rehabilitation clinic | | | | | |
| 5. | Other | | | | | |