The Impact of COVID-19 Pandemic on Medical Education Across African Countries

Please consider this information carefully before you decide to participate in this research.

Purpose of the research: To understand medical student perspectives to changes in medical school education from medical students worldwide during the COVID-19 pandemic in order to inform medical school curricular changes in future health crises.

What you will do in this research: We will ask you to answer survey questions about your educational background and thoughts about your training and education.

Time required: Participation will take approximately 10 minutes.

Risks: There are no anticipated risks associated with participating in this study.

Confidentiality: Your participation in this study will remain confidential and your personal information will not be collected. The use of the information provided in the form will be in line with the purpose of the research and will not be used for any other purpose.

Participation and withdrawal: Your participation in this study is completely voluntary and you may withdraw at any time for any reason without consequences. You may choose not to participate.

If you have any questions, please send an email to:
Study Contact: Bereket Alemayehu or Amani Abdu
bereketalemayehu93@gmail.com, amaniabdu2017@gmail.com

* Required

1. I understand the information provided to me about this study and know that I can contact the researcher with questions at any time. *

   Mark only one oval.
   
   ☐ I consent to participate  
   ☐ I do not consent  

   Skip to question 2

Demographic Data

2. What country is your medical school in?

   ____________________________

3. What is the name of your medical school?

   ____________________________
4. What degree will you receive at the completion of your medical education?

*Mark only one oval.*

- [ ] MD
- [ ] MBBS
- [ ] Other: ________________________________

5. What's the length (in years) of your medical school?

*Mark only one oval.*

- [ ] Less than 4 years
- [ ] 4
- [ ] 5
- [ ] 6
- [ ] More than 6 years

6. Which year are you currently enrolled in?

*Mark only one oval.*

- [ ] 1
- [ ] 2
- [ ] 3
- [ ] 4
- [ ] 5
- [ ] 6
- [ ] Above 6th year

7. Are you in the pre-clinical (basic science) or clinical (hospital-based) phase of your school?

*Mark only oval.*

- [ ] Pre-clinical
- [ ] Clinical
- [ ] Other: ________________________________
8. What is your gender?

*Mark only one oval.*

☐ Female  
☐ Male  
☐ Prefer not to say  
☐ Other: __________________________

9. What is your age?  

________________________

*Skip to question 10*

**Pre-COVID-19 Pandemic Medical Education**

This section relates to your experience before the beginning of the COVID-19 pandemic.

10. In general, before the pandemic what was the format of your classes?

*Mark only one oval.*

☐ Online  
☐ In-Person  
☐ Both  
☐ Other: __________________________

11. In your experience before the pandemic, what were some of the positives of the format of your classes selected above?

*Check all that apply.*

☐ Physical presence  
☐ Easier to engage with the material  
☐ Increased flexibility of time  
☐ Greater availability of professors  
☐ Increased ability to ask questions  
☐ Greater connection with classmates  
☐ Increased structure to the day  
☐ Decreased commuting time  

Other: __________________________
12. In your experience before the pandemic, what were some of the negatives of the format of your classes selected above?

*Check all that apply.*

- [ ] Lack of flexibility
- [ ] Wasted time
- [ ] Lack of structure
- [ ] Decreased availability of professors
- [ ] Decreased ability to ask questions
- [ ] Lesser connection with classmates
- [ ] Increased structure to the day
- [ ] Increased commuting time
- [ ] Technological issues

Other: 

13. Before the pandemic, did you interact with patients in the normal course of your training this year?

*Mark only one oval.*

- [ ] Yes
- [ ] No

14. Please select all of the ways you interacted with patients.

*Check all that apply.*

- [ ] Telephone
- [ ] Video
- [ ] In person visits/rounding
- [ ] Participation in procedures

Other: 

15. In general, before the pandemic, did you feel like you were in a supportive learning environment?

*Mark only one oval.*

- [ ] Yes
- [ ] No
16. Please select your satisfaction level before the pandemic with the following aspects of the learning environment.

*Mark only one oval per row.*

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Neither satisfied nor dissatisfied</th>
<th>Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty engagement in classes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ease of reaching faculty members for questions</td>
<td></td>
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<tr>
<td>Amount of time available for academic work</td>
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<tr>
<td>Volume of academic content/materials</td>
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<tr>
<td>Ability to engage in peer to peer learning</td>
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<tr>
<td>Flexibility of time</td>
<td></td>
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</tbody>
</table>

17. Before the pandemic, how were your theoretical (medical licensing, multiple choice, written, etc.) exams administered? Please check all that apply

*Check all that apply:*

- [ ] At-home on a computer/tablet with no proctoring
- [ ] At-home on a computer/tablet with proctoring
- [ ] On-campus on a computer/tablet with no proctoring
- [ ] On-campus on a computer/tablet with proctoring
- [ ] At a testing site on a computer/tablet with no proctoring
- [ ] At a testing site on a computer/tablet with proctoring
- [ ] On campus on paper
- [ ] At-home on paper
- [ ] At a testing site on paper
- Other: [ ]

**Post-COVID-19 Pandemic Medical Education**

*The following questions relate to your experience after the start of the COVID-19 pandemic.*
18. Were your classes or attachments suspended for any length of time since the start of the COVID-19 pandemic?

Mark only one oval.

☐ Yes  Skip to question 19
☐ No  Skip to question 21

Suspended Class Section

19. Around what date were your classes or attachments suspended?

Example: January 7, 2019

20. Did your classes or attachments resume at any point in any format since they were suspended?

Mark only one oval.

☐ Yes  Skip to question 21
☐ No  Skip to question 29

Changed Class Section

21. If your classes or attachments were temporarily suspended, when did they resume?

Example: January 7, 2019

22. Did your classes change format?

Mark only one oval.

☐ Yes
☐ No  Skip to question 29

23. Around what date did your classes change format?

Example: January 7, 2019
24. What was the format of your classes after the changes took place?

*Mark only one oval.*

- Online  
  *Skip to question 25*
- In-Person  
  *Skip to question 27*
- Both (hybrid)  
  *Skip to question 25*

**Online Class**

25. What was the format of online learning?

*Check all that apply.*

<table>
<thead>
<tr>
<th>Check all that apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online classes in live video format</td>
</tr>
<tr>
<td>Online classes in discussion groups</td>
</tr>
<tr>
<td>Online classes by telephone</td>
</tr>
<tr>
<td>Online classes with videoconferencing</td>
</tr>
<tr>
<td>Online classes with recorded videos</td>
</tr>
<tr>
<td>Online classes with social media platforms (Facebook, Twitter, etc.)</td>
</tr>
</tbody>
</table>

26. Do you think that the online learning experience could be improved?

*Mark only one oval.*

- Yes
- No

**Perspective on Class Changes**
27. In your experience since the pandemic changes, what were some of the positivés of the new, changed format of your classes?

*Check all that apply.*

- Physical presence
- Easier to engage with the material
- Increased flexibility of time
- Greater availability of professors
- Increased ability to ask questions
- Greater connection with classmates
- Increased structure to the day
- Decreased commuting time

*Other:*

28. In your experience since the pandemic changes, what were some of the negatives of the new, changed format of your classes?

*Check all that apply.*

- Lack of flexibility
- Wasted time
- Lack of structure
- Decreased availability of professors
- Decreased ability to ask questions
- Lesser connection with classmates
- Increased structure to the day
- Increased commuting time
- Technological issues

*Other:*

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**Patient Interaction**

29. Were you allowed to interact with patients once the pandemic began?

*Mark only one oval.*

- Yes [ ] *Skip to question 30*
- No [ ] *Skip to question 32*

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**Patient Interaction**
30. Please select all of the ways you interacted with patients once changes in your med school curriculum began.

*Check all that apply.*

- [ ] Telephone
- [ ] Video
- [ ] In-person visits/rounding
- [ ] Participation in procedures

31. Did you interact with COVID-19 patients since the changes in your medical school curriculum began?

*Mark only one oval.*

- [ ] Yes, In-person interactions with COVID-19 positive patients
- [ ] Yes, virtual (phone/video) interactions with COVID-19 positive patients
- [ ] No
- [ ] Other: _______________________________

Perspective on Learning Environment

32. Did you feel like you were in a supportive learning environment after the pandemic started?

*Mark only one oval.*

- [ ] Yes
- [ ] No
33. Please select your satisfaction with the various aspects of the learning environment after the pandemic started.

*Mark only one oval per row.*

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Neutral</th>
<th>Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation of classed by faculty</td>
<td></td>
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<tr>
<td>Ease of reaching faculty members for questions</td>
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<tr>
<td>Amount of time available to complete assignments</td>
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<tr>
<td>Amount of content information</td>
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<tr>
<td>Ability to engage in peer to peer learning</td>
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</tbody>
</table>

34. How were your theoretical (Step 1, NBME, multiple choice, written) exams administered after the pandemic started?

*Check all that apply.*

- [ ] At-home on a computer with no proctoring
- [ ] At-home on a computer with proctoring
- [ ] On-campus on a computer with no proctoring
- [ ] On-campus on a computer with proctoring
- [ ] At a testing site on a computer with no proctoring
- [ ] At a testing site on a computer with proctoring
- [ ] On campus on paper
- [ ] At-home on paper
- [ ] At a testing site on paper
- [ ] All exams were suspended or cancelled

Safety

35. In relation to your medical education, did you feel safe with your medical schools response to the COVID-19 pandemic?

*Mark only one oval.*

- [ ] No
- [ ] Yes
- [ ] Other: __________________________________________
Volunteering

36. Did you engage in volunteer opportunities during the COVID-19 pandemic?

Mark only one oval.

☐ Yes  Skip to question 37
☐ No  Skip to question 38

Volunteer Opportunities

37. What type of volunteer opportunities did you engage in during the COVID-19 pandemic?

_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________

Mental Health

38. How have the pandemic-related changes in medical education affected your mental health?

Mark only one oval.

☐ Extremely positively impacted
☐ Positively impacted
☐ Neither positively nor negatively impacted
☐ Negatively impacted
☐ Extremely negatively impacted

39. Please use the space below for any additional comments you would like to share regarding any information covered in this survey

_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________