

Appendix 1. Problems in Conduct of Thesis during COVID-19 Pandemic in India: A Nation-Wide Survey of Postgraduate Medical Students (PROCON THESIS)

The effect of the coronavirus disease 2019 (COVID-19) pandemic on the conduct of thesis work of postgraduate medical students: a nationwide survey

This survey is to find out the problems in the conduct of thesis-related work by postgraduate medical students who have been on the front line in the management of pandemic in India.

I. Demographics

1. Which of the following type of hospital you belong?

Mark only one oval.

- State government medical college and hospital
- Central government medical college & hospital
- Private medical college & hospital
- Corporate hospital

2. Which of the following courses you are currently following/were in the last 1 year as a trainee?

Check all that apply.

- MD (Doctor of Medicine)
- MS (Master of Science)
- DM (Doctor of Management)
- MCh (Magister Chirurgiae)
- DNB (Diplomate of National Board)
- FNB/PhD (Fellowship of National Board/Doctor of Philosophy)

3. Which subject specialization/super-specialization you are currently pursuing?

4. What is your type of study?

Mark only one oval.

- Randomized controlled trial
- Prospective observational (cohort or case control)
- Retrospective
- Descriptive

5. Was your study related to COVID-19 patients?

Mark only one oval.

- Yes
- No

6. How frequently is your departmental meetings being held to review thesis progress?

Check all that apply.

	Before pandemic	After pandemic
Every 6 months	<input type="checkbox"/>	<input type="checkbox"/>
Every year	<input type="checkbox"/>	<input type="checkbox"/>
Only at protocol initiation	<input type="checkbox"/>	<input type="checkbox"/>
Twice: at protocol initiation and final submission	<input type="checkbox"/>	<input type="checkbox"/>
No departmental meetings/only review by the guide	<input type="checkbox"/>	<input type="checkbox"/>

II. Effect of pandemic on thesis/research project

7. How is your thesis work/research project impacted by the pandemic?

Mark only one oval.

- Strongly affected
 Moderately affected
 Mildly affected
 Not affected
 Benefitted

8. What problems did you face in the conduct of thesis at the time of ongoing COVID-19 pandemic (multiple options can be selected).

Check all that apply.

- Problem in finding feasible thesis topic
 Early fall out of cases from intervention/control arms/loss to follow-up (e.g., recruited patient turning positive)
 Changing of inclusion/exclusion criteria in the middle of the conduct of study to achieve the sample size
 Problems in recruitment
 Procedural limitation (e.g., risk of aerosol generation/risk of infection)
 Posting to unrelated thesis COVID-19 areas
 Prolonged illness (self/family)/self-quarantine
 Post-COVID-19 status of recruited patients leading to exclusion/delay in the recruitment in the study
 Less availability of guide/mentor to review the progress because of the COVID-19 work
 No problem

9. What were the problems in recruitment of cases? (multiple options can be selected.)

Check all that apply.

- Decrease footfall of non-COVID-19 patients to hospital
 Patient profile is different from the usual non-pandemic times
 Problems in time management due to covid duties(prolonged duties, exhaustion)
 Limited open service areas (e.g., elective OT, limited procedures, limited intensive care unit (ICU) beds, limited samples)
 Shortage of equipment, manpower, and drugs for the conduct of the study (as these shunted to COVID-19 care)
 Difficulty in achieving consent from patients
 Difficulty to conduct because of lockdown/transport issues
 I didn't face any problem in recruitment/enrollment of cases

10. Have you achieved your sample size in the thesis submitted/done in the current year?

Mark only one oval.

- Yes, submitted and sample size achieved
 No, submitted without achieving full sample size
 Yet to submit and anticipated sample size achieved
 Yet to submit and anticipated sample size not achieved

11. Did your local IEC/University provide you with a relaxation on the timing for submission of thesis protocols/final manuscript?

Mark only one oval.

- Yes
 No

12. What are alternative options to mandatory thesis submission for getting degree? (need to select each row.)

Mark only one oval per row.

	Strongly disagree	Disagree	Neither agree/ disagree	Agree	Strongly agree
Systematic reviews/meta-analysis as alternative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Departmental audits & presentation in national conferences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Publication of 2 or more case reports as first/corresponding author indexed journal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Publication of protocol/original idea in an indexed journal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Portfolio/logbook of self in departmental projects/manuscript publication (team-based research rather than student alone approach)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Task-based assessment of research methodology(e.g., planning a protocol/project for a problem during exam)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13. What suggestions to improve the quality of thesis work? (need to select each row.)

Mark only one oval per row.

	Strongly disagree	Disagree	Neither agree/ disagree	Agree	Strongly agree
Research methodology training must before protocol submission	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Permission to conduct thesis post-submission to achieve a sample size	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Collaborative studies involving multiple departments with 2 or more students (submitting the same but good quality thesis)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Research should be separated from clinical work (e.g., fixed exclusive time for research in a week/month)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biostatistics department in medical college to facilitate research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financial incentive (for peer-reviewed original idea)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14. Any other suggestion

15. How was the pandemic best utilized by you? (on a scale of 0 to 10.)

Mark only one oval per row.

	7-10	5-7	2-5	0-2
As a front line worker in COVID-19/emergency areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self-study	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attending webinar & elearning portals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thesis/research project related work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

III. Demographics

16. Which of the following type of hospital you belong?

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17. Which of the following courses you are currently following/were in the last 1 year as a trainee?

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18. Which subject specialization/super-specialization you are currently pursuing?

19. What is your type of study?

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20. Was your study related to COVID-19 patients?

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IV. Effect of pandemic on thesis/research project

22. How is your thesis work/research project impacted by the pandemic?

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- Strongly affected
- Moderately affected
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- Not affected
- Benefitted

23. What problems did you face in the conduct of thesis at the time of ongoing COVID-19 pandemic? (multiple options can be selected.)

Check all that apply.

- Problem in finding feasible thesis topic
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- Less availability of guide/mentor to review the progress because of the COVID-19 work
- No problem

24. What were the problems in recruitment of cases? (multiple options can be selected.)

Check all that apply.

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26. Did your local IEC/university provide you a relaxation on timing for submission of thesis protocols/final manuscript?

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27. What are alternative options to mandatory thesis submission for getting degree? (need to select each row.)

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