

Introduction of an Online Mentoring Program for Final Professional MBBS Students

Abstract

Background: Mentoring helps in the personal and professional development of mentees and helps them develop self-confidence in their work. Final-year undergraduate medical students face many challenges but they also have to gain the confidence to start working independently and plan their careers in the near future. In the coronavirus disease scenario, many of these challenges were amplified, and final-year students were in greater need of mentoring. Even though mentoring had been introduced under the new curriculum in 2019, formal online mentoring programs were nonexistent in most Indian medical colleges. Therefore, it was aimed to implement and evaluate an online mentoring program for final-year undergraduate medical students. **Materials and Methods:** This prospective study was conducted with 16 mentees allotted to the principal researcher. A needs assessment survey was conducted before finalizing the program. A mentoring module was designed, and subsequently, five rounds of individual mentoring sessions were conducted on “Google Meets.” Feedback was obtained from the mentees and analyzed. **Results:** Most mentees (93.8%) agreed that an online mentoring program should be introduced. The mentees were satisfied with the online mentoring program (5-point Likert Scale; median = 4) and felt that they had received motivation and gained confidence to overcome challenges. The majority of the respondents (80%) felt supported during mentoring, whereas 86.67% agreed that they were able to harness their positive attributes and started working toward their goals. **Conclusions:** The online mentorship program was successful in improving the confidence of the medical students in dealing with academic and nonacademic issues.

Keywords: Mentoring, mentors, professionalism, time management

Introduction

The word “mentor” traces its origins to Greek mythology; the legendary Odysseus (also known as Ulysses) assigned his friend “Mentor” to care for his son.^[1-3] Similarly, in the “gurukuls” of ancient India, the “shishyas” (or students) were entrusted to the care of the “Guru” who guided the personal and professional development of the “shishyas” and can thus be identified as the equivalent of a modern-day mentor.^[1,2] Today, the word mentor refers to an experienced and/or trusted advisor and mentorship signifies a relationship, in which a more experienced mentor guides the less experienced mentee.^[4] In medicine and medical education, mentoring is a process that not only helps in the personal and professional development of the mentee but also helps the mentee in developing self-confidence in their work.^[5] Some other benefits for the mentees include

the acquisition of knowledge and skills including communication skills, receiving constructive feedback, career guidance, and an impetus for research activities.^[3] Mentoring also helps in the instillation of ethics and humanitarianism in the mentees because they view their mentor as a role model.^[1,3,6,7]

However, despite these benefits, formal mentoring programs were virtually nonexistent in most of the medical colleges in India before the implementation of the competency-based medical education curriculum in 2019.^[1,2] It is often difficult for medical undergraduate students to find a mentor who has the time to listen to their problems and who can guide them in academic and nonacademic matters. This may be attributed to various causes such as the mismatch between increasing undergraduate seats and the stagnant faculty numbers which has reduced interaction between students and teachers^[1] or the burden of administrative and clinical duties on teaching faculty which makes them

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Submitted: 02-May-2024

Revised: 14-Jul-2024

Accepted: 30-Aug-2024

Published: 01-Nov-2024

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Access this article online

Website:
<https://journals.ww.com/IJAB>

DOI:
10.4103/ijabmr.ijabmr_208_24

Quick Response Code:



How to cite this article: Verma N, Badyal DK, Aggarwal N, Modi JN, Sethi S. Introduction of an online mentoring program for final professional MBBS students. *Int J App Basic Med Res* 2024;14:214-9.

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unavailable for mentoring. Further, students are often hesitant to approach the faculty for mentoring needs unless there is an established program for the same or there is an institutional culture that encourages mentor–mentee interaction. Whatever the reason, the lack of mentoring hampers the ability of the students in coping with the challenges of a medical college.

While the need for mentoring 1st-year medical undergraduate students has been well documented and multiple studies have been conducted to introduce mentoring programs for and assess the feedback of 1st-year students,^[4,6,8] a mentoring relationship is beneficial for students across all years of undergraduate study as well as during postgraduation and beyond.^[1]

Final-year MBBS students face their own unique set of challenges; not only do they have to acquire a large amount of knowledge and clinical skills within a limited period of time but they also have to gain the confidence to start working as independent doctors in the near future and/or plan their careers by selecting their preferred streams for postgraduation after completing MBBS.^[1,9]

In the coronavirus disease 2019 (COVID-19) scenario, many of these challenges were further amplified, and final-year MBBS students were in greater need of mentoring than before. The prolonged and widespread lockdown during the pandemic disturbed their study schedules and led to a pause in their practical and clinical classes due to the sudden shift from physical to online teaching–learning.^[10] Many of them could not even carry their books with them as they left college premises and dormitories, with the result that they were totally dependent on online learning resources. Then, there were issues with internet connectivity, especially for the students who lived in rural areas. There was anxiety among them regarding many issues including the inability to cover all topics for forthcoming exams, possible delays in final professional examinations and internship, loss of practice of clinical skills, and health concerns in travelling to college after reopening and examining patients in OPD/ward settings. Time management was another major issue being faced by many students, and despite their best efforts, they were finding it difficult to manage time and focus on their studies. To add to this, the peer support system that students invariably rely on for support and sharing their problems was affected. The MBBS final-year students were especially worried that their batch would bear the brunt of the delay due to the lockdown while the other batches would be able to make up for the loss of time.

As the students were sent home during the pandemic, it was not possible to conduct face-to-face mentoring sessions for the students. Researchers have earlier emphasized the importance of introducing online mentoring to keep up with the changing times and the lockdown provided an opportunity to introduce online mentoring for the students.^[1] Despite a long list of benefits, we must keep in mind that

online mentoring does have its fair share of challenges and concerns.^[11,12] There are very few studies on the introduction of online mentoring for medical undergraduate students in India. Therefore, this project was planned with the aim of introducing an online mentoring program for final-year MBBS students and assessing their perception of the same.

Materials and Methods

This quasi-experimental study was conducted with the 16 mentees allotted to the principal researcher at the beginning of the academic year. The mentees were randomly allocated by the mentoring faculty in-charge from among the 100 final-year MBBS students of 2016 admission batch. Participation in the study was voluntary.

Prementoring activities

A core committee comprising all the Medical Education Unit members was constituted and sensitized about the project. The needs assessment survey questionnaire and feedback questionnaire for students were designed on Google Forms and validated by experts. Ethics approval was obtained from the Institute Ethics Committee (No. 1156/IEC/07/2020 dated 15 June 2020). After obtaining informed consent from all student mentees, the needs assessment survey was conducted, and the responses were analyzed before finalizing the mentoring program.

Mentoring activities

All the mentees were added to a WhatsApp group for easy dissemination of information regarding the schedule of mentoring sessions and for asking the mentees to select preferred dates and time slots for their mentoring sessions. First, an online sensitization of the student mentees was conducted on the “Google Meets” platform. Mentees were apprised of the objectives and the benefits of an online mentoring program. The scheduling plan of the mentoring sessions was discussed, and the first round of online mentorship sessions was scheduled on the same “Google Meets” platform. The link to join the online session was shared by the mentor on the WhatsApp group 10–15 min before the sessions. Although each session was allocated 15-min time, mentees had the option to select an additional time slot for further discussion. If any mentee was unable to attend the sessions due to unavoidable circumstances, they were allowed to reschedule after informing the mentor. One such round was conducted every month for 5 months between July and November 2020 (total 5 rounds).

Format of individual mentoring sessions

Before the first round, 5 questions were shared on the WhatsApp group and all mentees were asked to think and write down their replies on a sheet of paper (not to be shared on the group) [Table 1].

The individual session started with the discussion of the mentee’s responses to these five questions, especially the

last question about where they needed the most help. The focus areas of discussion were academics and confidence building as the majority of the mentees (12, 75% and 11, 68.8%, respectively) had selected these in the needs assessment survey. Attendance records and academic performance in all final-year subjects were discussed and if the mentee was facing any doubts regarding any topic, the mentor arranged a meeting with a faculty member from that subject to clarify all queries. The mentees were encouraged to maintain a study schedule/reading plan with time distributed between all subjects. The importance of time management was also emphasized, and time management techniques were discussed. No solutions were offered; rather the mentees were encouraged to think of solutions and to feel confident of being able to overcome any challenges.

Feedback from students

The feedback form was administered through the WhatsApp group to all the mentees after the conclusion of five rounds of mentoring sessions. The feedback questionnaire consisted of both open-ended and close-ended questions including questions, in which responses had to be marked on a 5-point Likert Scale. Feedback regarding the overall experience with the online mentoring program, the level of effort put in by the mentor, the future format of the mentoring program, and suggestions for further improvement in the mentoring program were sought. The importance of honest and unbiased feedback was conveyed to the mentees and also included in the introduction of the feedback form.

Data analysis

Quantitative data

The numbers and percentages were calculated automatically by Google Forms/Google Sheets and are presented as bar diagrams. For the Likert-type questions, median, mode, and interquartile range (IQR) were also calculated. Regarding the question regarding the future format of the mentoring program which was asked in both the needs assessment survey and the final feedback questionnaire, the responses were compared, and the *P* value was calculated.

Qualitative data

Thematic analysis was conducted for the qualitative data (replies to the open-ended questions).

Table 1: The 5 questions that were shared with all mentees before the first round of mentoring sessions

Questions

Where do you see yourself 2 years from now?
What are you doing really well that will help you achieve your goal?
What are the challenges you are facing in achieving your goal?
How do you plan to meet these challenges?
Where do you need the most help?

Results

All the 16 mentees were male students between 22 and 24 years of age.

Needs assessment survey

All 16 mentees responded to the needs assessment survey.

Most of the (15, 93.8%) respondents agreed that an online mentoring program should be introduced in the college. The respondents were asked to explain the reason for their answer to this question. The main themes derived from the responses were “Guidance and Advice,” “Motivation and confidence building,” and “Convenience of online mentoring.” The mentees’ opinion regarding the primary focus area(s) of the online mentoring program is presented in Figure 1.

Regarding the future format of the mentoring program especially after the lockdown was lifted and the college reopened, more than half of the respondents (56.3%) wanted a combination of online and face-to-face mentoring sessions, 6 respondents (37.5%) wanted only face-to-face mentoring sessions, whereas only one respondent (6.3%) wanted only online mentoring sessions to continue.

Feedback survey

15 mentees responded to the feedback survey form.

- The respondents were asked to rate their overall experience with the online mentoring program on a scale of 1–5. Most respondents were satisfied with their experience with the online mentoring program (median = 4, mode = 4, 5, and IQR = 2) [Figure 2]
- Respondents were then asked to specify what they had gained from the online mentorship sessions and the responses were thematically analyzed [Table 2]
- The respondents were asked about the future format of the mentoring program. The same question was asked previously in the needs assessment survey, and a comparison of the responses received is presented in Table 3

In your opinion what should be the primary focus area(s) of the online mentoring programme? (you may select multiple options) (n=16)

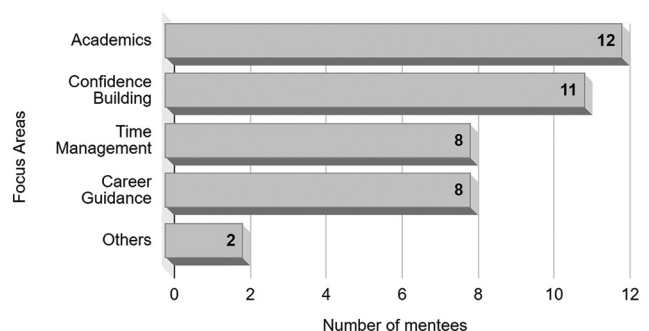


Figure 1: Mentees’ opinion regarding the focus area(s) of the online mentoring program (as per the needs assessment survey) (n = 16)

Table 2: Thematic analysis of the responses received to the question “What did you gain from the online mentorship sessions?” (n=15; 100%)

Theme	Number of respondents	Selected responses
Time management skills	10	“I learned effective methods of time management” “Time utilization. Increase in studying time from 15 min to around 3 h everyday” “sir would ask us to make a next week study schedule in advance that really helped us”
Motivation and guidance	6	“Before the program, I was not studying on a daily basis but after the program I got motivation” “...and constant Guidance from faculty regarding academic expectations and exams etc.”
Confidence building	5	“Time management and confidence” “Confidence building”
Solutions to academic queries	4	“method of study” “how to improve my study”
Miscellaneous	2	“how to maintain a good relationship with colleagues and family” “I think this is the best way to be in touch with your faculty as we are used to when we were in college”

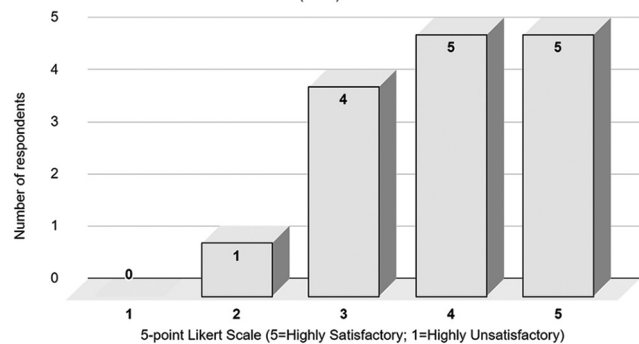
Table 3: Comparison of the opinion of respondents about the future format of the mentoring program in the two surveys

	Percentage of respondents selecting the given option		P
	Needs assessment survey	Feedback survey	
A combination of online and face-to-face mentoring sessions should continue	56.3	66.7	0.56
Only face-to-face mentoring sessions should continue	37.5	20	0.29
Only online mentoring sessions should continue	6.3	13.3	0.52

d. Respondents were asked to explain the reason for their answer to the above question. Excerpts from a few selected responses are presented verbatim below–

- “Both are required”
- “Online mentoring sessions are more time saving since the time utilized in reaching the venue is saved”
- “It is more convenient for both the mentor and the mentee for the interaction starts just at the click of a button. Moreover, in times of the current pandemic going on, it is a good way of mentoring students without affecting the quality of mentorship. However, face to face mentoring sessions have more of a “human” touch to them and should be conducted in between the online sessions as per the mentee’s need”
- “I think sometimes when exams are near then we can have online sessions and then on other occasions we can have our routine face-to-face sessions”
- “Online mentorship sessions are more suited for me because it saves time (because the mentor is just a click away) and it also allows for a more frequent check on my performance. In rest of the ways, it is as good as a real-time mentoring session”

On a scale of 1 to 5, how would you rate your experience with the online mentoring programme? (n=15)

**Figure 2: Mentees’ opinion regarding their overall experience with the online mentoring program (n = 15)**

- “Time efficient. Health oriented. Can be adjusted according to circumstances.”
- e. There was a consensus that the level of effort put in by the mentor to understand and address their concerns and queries (on a scale of 1–5) was excellent (median = 5, mode = 5, and IQR = 1). All mentees agreed that they were able to formulate a study schedule/reading plan and better manage their time based on the advice and feedback received from the mentor
- f. Feedback regarding the online mentoring sessions was obtained using a 5-point Likert Scale and is presented in Figure 3
- g. Mentees were then asked whether they felt supported and ready to face any challenges, whether they were able to harness their positive attributes and start working toward attaining their goal and felt greater confidence in dealing with academic and nonacademic issues after attending the online mentoring sessions. The results are presented in Figure 4.

In the final section of the feedback form, respondents were asked to provide suggestions for further improvement of the online mentorship program. Six mentees felt that the

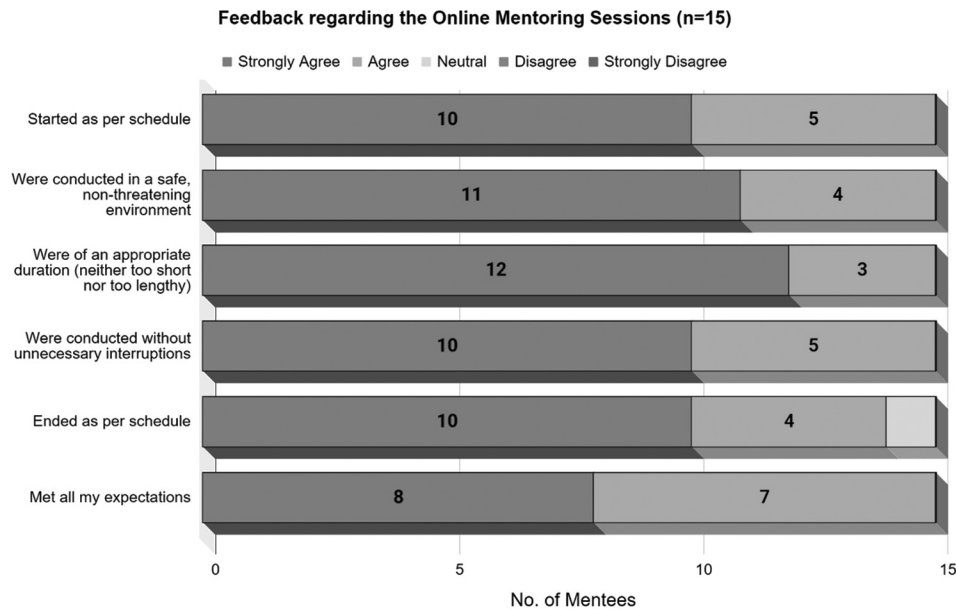


Figure 3: Mentees' feedback regarding the online mentoring sessions (n = 15)

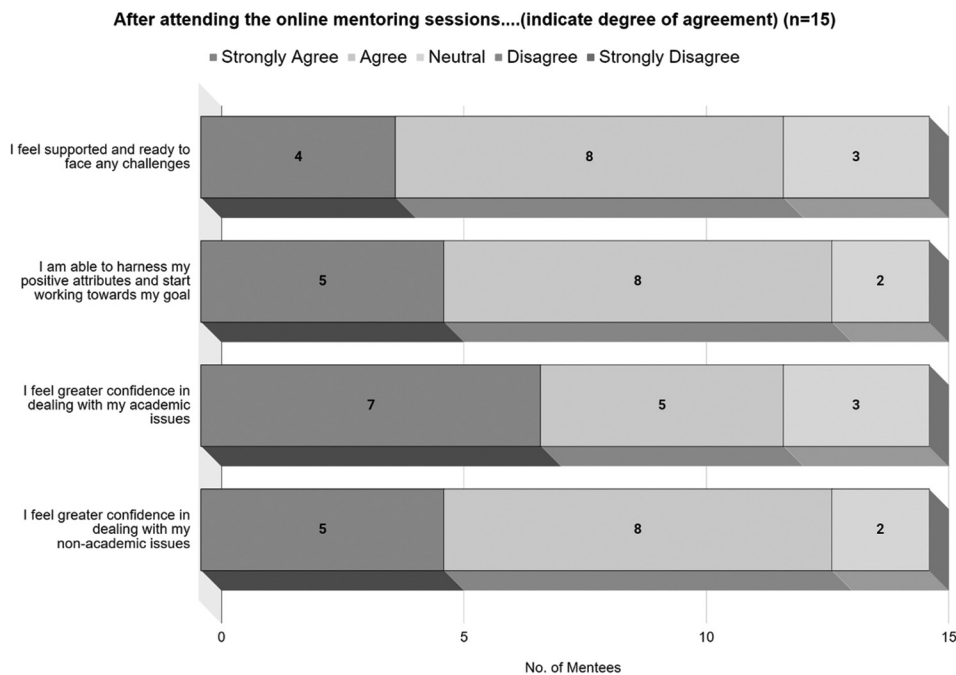


Figure 4: Mentees' opinion when asked whether they feel supported and confident to face challenges and start working toward their goal after attending the mentoring sessions (n = 15)

program was working perfectly well and no improvements were needed, whereas 3 respondents wanted the frequency of sessions to be increased. Some of the other suggestions are presented verbatim below–

- “more focus on time management”
- “sessions are a little short in my opinion. A session of around 20–25 min per person would be adequate”
- “If there were a more extensive record of our academic performance, it would help us better in knowing which subjects and which topics to focus more on.”

Discussion

The needs assessment survey clearly brought out the need for starting an online mentoring program for the final-year students. A similar needs assessment was conducted by Bhatia *et al.*, in which 97.7% of the students in the institution had felt the need for introducing a formal student mentoring program.^[6] Due to the global issues that surround online privacy and confidentiality, especially when using online communication applications, the mentees were

apprehensive of continuing with online sessions after the reopening of colleges. These issues have been flagged by other researchers previously.^[11,12] Therefore, during the sensitization, the mentees were reassured that with regard to the discussions privacy and confidentiality would be maintained.

Fifteen mentees responded to the feedback survey. Most respondents were satisfied with their experience with the online mentoring program and wanted to continue attending the online mentoring sessions. Previous studies have reported similar findings.^[4,7,8] The mentees also felt that the online sessions were able to simulate the actual environment of college and were as good as real-time (or face-to-face) mentoring sessions.

This signifies that the online mentoring program was successful in allaying the apprehensions in the minds of the mentees, and after attending the five rounds of individual mentoring sessions, the mentees realized that confidentiality and privacy could be ensured even in online mentoring platforms and that the online discussions could be as effective as face-to-face discussions conducted in the college setting.

All the respondents agreed that they were allowed to select a suitable date and time slot for their individual mentoring sessions while 86.7% of respondents agreed that in unavoidable circumstances, they were allowed to reschedule their sessions for a later date. As pointed out in an earlier study, one of the biggest advantages of online mentoring is that it is more mentee centric because it permits flexibility and the sessions can be scheduled as per the needs of the mentee.^[2,11] According to the respondents, the online mentoring sessions were less time-consuming as compared to face-to-face mentoring sessions because the interaction could start instantaneously at the click of a button and they were a good way of mentoring the students during the pandemic and even afterward. This is one of the many advantages of online mentoring as reported earlier.^[12]

When asked again about the future of the mentoring program there was a clear shift in preference toward the online mentoring sessions (either in combination with face-to-face sessions or alone) signifying that online mode is considered feasible by the student mentees even in the postpandemic era. A majority of the respondents expressed preference for a combination of online and face-to-face mentoring sessions which reaffirms the complementarity of the two. As reported earlier, it is futile to compare traditional mentoring with online mentoring.^[12] Face-to-face mentoring can never be replaced but newer technological advancements can complement it and extend the advantages of mentoring to a larger number of mentees. This is significant, especially in the current scenario of increasing class sizes in Indian medical colleges and the need to mentor a large number of undergraduate students.

An overwhelming majority of respondents felt supported and ready to face any challenges and agreed that they were able to harness their positive attributes and start working toward their goals. Similar findings were reported previously,^[8] reaffirming the benefits of mentoring.

Conclusions

The online mentorship program was successful in improving the confidence of the mentees in dealing with academic and nonacademic issues. The mentees were satisfied with the implementation of the online mentoring program and appreciated the efforts of the mentor to understand their concerns.

Ethical clearance

This research has received clearance from the Institutional Ethics Committee of Base Hospital & Army College of Medical Sciences, Delhi Cantt. vide Letter No. 1156/IEC/07/2020.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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