

Online mentoring of undergraduate medical students during COVID-19 pandemic in north Karnataka

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Abstract: *Background:* Students faced many challenges during online education during covid pandemic. Hence we planned to provide online mentoring program to first-year medical students of our college in this situation. This included mentoring regarding academic guidance and mental well-being. *Aim and Objectives:* This study aimed to obtain feedback from I professional MBBS students regarding the online mentoring program. *Materials and Methods:* A mentorship program was designed for MBBS First Professional students. 150 first-year students were mentored among which 94 students participated in the mentoring sessions. We used pre-validated questionnaire to obtain feedback. *Results:* The mentoring sessions were directed towards 150 first professional year students. Each session was attended by an average of 119.83 ± 3.65 students in two batches. The feedback obtained from mentees showed the mentoring program increased their confidence, instilled interest in online education, reduced their stress and also helped to achieve the academic objectives. *Conclusions:* Online Mentoring program significantly addressed the student's academic and social concerns. It instilled confidence, provided continuous motivation and kept the enthusiasm of mentees high to achieve their academic goals in the dreaded situation of pandemic.

Keyword: Mentoring, Student, Online Education, Academic, Social Concern.

Introduction

The COVID-19 pandemic brought unprecedented pain and misery to mankind affecting people from all walks of life. The uncertainty of events created a state of fear, anxiety, and helplessness amongst the student community and more so among the medical students since they observed it from close quarters. There was a disruption in their education, the students were barred from attending classes on the campus, there was sudden change to newer modes of online teaching, and they also had to deal with the general sense of negativity and fear of contracting the Covid-19 infection.

The students also had the problem of uncertainty regarding the changes that would be made to their course structure and university examination schedules. All these had a great bearing on their mental and physical health. It was evident that the students required greater support and guidance. The educators had to be more understanding to these varying needs of the students.

Mentoring is a proven way for student success in medical school and increases the likelihood of eventual career satisfaction [1]. In the context of medical education, effective mentoring has been found to help with professional identity formation, development of professionalism, research participation, productivity, career planning, and supports overall student well-being [2].

Mentoring is different from coaching or tutoring. Many definitions of mentoring are in use. The most often cited one is "Mentoring is a process whereby an experienced, highly regarded, empathetic person (the mentor) guides another (usually younger) individual (the mentee) in the development and re-examination of their own ideas, learning and personal and professional development. The mentor and the mentee works in the same organization (but not necessarily) or same field. The mentor does mentoring by listening or talking in confidence with the mentee." [3]. The goal is to encourage the mentee to reach

her/ his full potential by sharing knowledge, experience, providing emotional support and encouragement [4]. Considering the unprecedented circumstances of pandemic we planned to conduct mentoring program for our first professional medical students in online mode. Not many studies are present regarding the usefulness of online mentoring program for I - professional year MBBS students. Hence this study aimed to obtain feedback from I - professional MBBS students regarding the online mentoring program.

Material and Methods

The present cross-sectional study was conducted on 150 first professional medical students in Al Ameen medical college, Vijayapura. We devised a different format of mentoring considering the pandemic situation. It was voluntary for the students to opt for the mentoring. The mentoring was conducted for six months between May 2020 to October 2020 in the online mode during National lockdown period. Every month two similar sessions were conducted, and students chose to attend them based on their convenience.

The content of the mentoring sessions included academic guidance, tips for online learning, university updates, guidance for holistic wellness and group activities to enhance scientific knowledge about Covid-19. To boost peer interaction and to promote mental wellbeing, activities in art and linguistics were used as a tool. For the activities the students were clustered into groups, to encourage communication, teamwork, and interaction among the peers. The students were encouraged to interact and share their perspective and concerns through chat box, WhatsApp, emails, and personal calls to the mentor. The mentoring program drew insights to plan the content from the article "Mentoring during the COVID-19 pandemic" career column in Nature. [5].

Institutional ethics committee approval was obtained to the conduct the study. The mentoring program was continued for six months until offline campus activities were resumed. At the end of the program feedback was obtained from only those students who had attended all the mentoring sessions. Among the eligible students (N=94) the students who consented (N=51) were included in our study.

A standard questionnaire was devised to collect their feedback which was validated and sent via Google form to the students. The questionnaire included close ended and open-ended questions. For the closed-ended questions rating was done on 5-point Likert scale. The results were automatically analysed using Google forms. The categorical data were presented as mean and percentage. The descriptive responses to open ended questions were analysed and coded.

Results

The mentoring sessions were directed towards 150 first professional year students. Each session was attended by an average mean of 119.83 ± 3.65 students in two batches. All the six mentoring sessions were attended by 94 students and were eligible to participate in the study. Out of 94 students who met the inclusion criteria, we received responses and consent to participate in the study from 54.25% (51) students. The students' perception regarding the utility of the mentoring program is presented in table 1.

Qualitative Results: Four qualitative questions were part of our questionnaire used to collect feedback on the online mentoring sessions. The first question was *the challenges faced by the students during lockdown and Covid pandemic related to their wellbeing and academics*. The students' responses received from 51 students were read and reread by the authors. The salient and most frequently repeated statements were compiled and are presented in table 2.

The second qualitative question asked was *"What students liked about the Online mentoring sessions?"* We received the following prominent responses from the students.

1. The students expressed their gratitude for the innovative online mentoring sessions conducted for them.
2. The most common comment was that mentoring instilled confidence in them and was a source of continuous motivation.
3. The sense of connection the online mentoring gave them was much

appreciated and students felt it very useful to bond with their peers during group work.

4. Many students also wrote that the enthusiasm and efforts of the mentor to help them appealed to their conscience and hence they

felt motivated and even obliged to work harder and do better. The mentoring was also considered as a constant reminder for academic focus and ways to handle mental chaos during the pandemic.

Table-1: Students feedback regarding usefulness of the mentoring program							
Item No	Query	Responses on Likert Scale (1 to 5)					Mean score
		Strongly disagree	Dis agree	Neutral	Agree	Strongly agree	
1	The mentoring sessions were helpful to me during the Covid times	0%	0%	23.5% (12)	21.6% (11)	54.9% (28)	4.31
2	The mentoring sessions helped me to manage my stress	0%	5.9% (3)	21.6% (11)	25.5% (13)	47.1% (24)	4.14
3	The mentoring sessions helped me to accept the inevitable situation due to Covid	0%	3.9% (2)	19.6% (10)	27.5% (14)	49% (25)	4.21
4	The mentoring sessions offered solutions for handling stress and isolation during the Covid lockdown	0%	5.9% (3)	23.5% (12)	23.5% (12)	47.1% (24)	4.11
5	Mentoring was helpful in balancing my emotions during the covid pandemic	0%	7.8% (4)	25.5% (13)	27.5% (14)	39.2% (20)	3.98
6	The mentoring helped me to build my confidence	0%	2% (1)	17.6% (9)	19.6% (10)	60.8% (31)	4.39
7	The online mentoring helped me to overcome the anxiety of uncertainty during Covid pandemic	0%	7.8% (4)	25.5% (13)	31.4% (16)	35.3% (18)	3.94
8	The mentoring was encouraging and motivating for my holistic wellbeing	0%	0%	19.6% (10)	25.5% (13)	54.9% (28)	4.35
9	The mentoring sessions guided me towards academic focus	0%	0%	17.6% (9)	23.5% (12)	58.8% (30)	4.41
10	Mentoring helped me to set my learning goals	0%	0%	13.7% (7)	27.5% (14)	58.8% (30)	2.78
11	Mentoring helped me to become aware of the challenges in online learning and provided insights in overcoming them.	0%	2% (1)	13.7% (7)	35.3% (18)	49% (25)	4.31
12	The mentoring guided me in achieving my learning goals	0%	0%	21.6% (11)	25.5% (13)	52.9% (27)	4.31
13	The mentoring plan has been effective in facilitating my understanding of the departmental expectations.	0%	2% (1)	23.5% (12)	33.3% (17)	41.2% (21)	4.13
14	The mentor was open for communication	0%	0%	9.8% (5)	17.6% (9)	72.55% (37)	4.62

Table-2: Challenges during lockdown and Covid pandemic related to students' wellbeing and academics
<ol style="list-style-type: none"> 1. A large majority of students expressed dearth of concentration and focus on studies. 2. Lack of resources like textbooks, references, notes, practical record books, Library access etc., 3. Experienced a lot of negative emotions like anxiety, fear, frustration, helplessness. 4. Feeling of isolation, depression, and mental stress due to reduced social interactions. 5. Negative reporting by mass media and social media apps made the situation grimmer and fearful. 6. Stress about the health and well-being of family members.

For the question “*Did online mentoring help your overall well-being and academic focus during the Covid pandemic, if yes how?*”, an over whelming majority of 92.1% (47) responded as to a great

extent and 7.9% (4) said it helped them to a certain extent. Some student responses are quoted verbatim in Table 3.

Table-3: Student responses verbatims		
SI No	Student responses verbatim	Code
1.	Academic focus used to fluctuate many times due to personal and pandemic reasons. But always online classes used to buck up confidence, concentration, commitment to work.	Academic improvement
2	My mentor was in constant touch with us & even motivated us overcome stress & depression & negative thoughts	Mental well being
3	Helped me to overcome my anxiety and focus on studies	Academic improvement. Mental well being
4	It was very much fruitful from all aspect whether from my mental well-being or social or emotional well being	Mental well being. Social connect
5	Yes, it did. I couldn't study at all in the initial few months but because of the sessions, I was kept in the loop that everyone else is studying which pushed me to be competitive as well.	Social connect

For the question “*How could the mentoring program be better?*” the student recommendations were limited, and most students appreciated the versatile nature of mentoring and found it just apt for the prevailing situation. The most common suggestion was to increase the frequency of the mentoring session to weekly sessions. Some students wanted more academic support in terms of revision of topics, tests, and quizzes.

Discussion

The World Health Organization declared a state of emergency with the onset of the pandemic, implementing many plans to avoid human physical contact in order to limit the spread of Covid-19. Some of these include travel restrictions, social distancing, work from home, use of mouth masks, and most significantly, shifting from face-to-face education to online education. However, student who enrolled in an online course encountered many challenges. In order to address these challenges faced by students, online mentoring and guidance was planned. Following the mentoring session, feedback was received.

Mentoring included psychological counselling, academic difficulties, and social concerns faced by students during the pandemic. As a result of

inadequate monitoring and guidance, it was assumed that students may lose interest and stop attending online classes, which may negatively impact their academic performance. As part of the study, first-year medical students were mentored for six months. The mentoring sessions included academic guidance, tips for online learning, university updates, holistic wellness guidance, group activities to enhance scientific knowledge about Covid-19 and enhance peer interaction, and extra-curricular activities in art and linguistics for providing much-needed distraction.

Mentoring in the present study continued until offline classes resumed. The experience of planning and executing this unique mentoring program during the pandemic and receiving feedback was extremely unique. The mentoring sessions were attended on average by 57.6% of students. Despite the varying situations that the students and their families were facing due to the prevailing pandemic, all of the sessions were attended by students.

The feedback received from the student at the end of the mentoring program was positive (Table 1). A significant proportion of students mentioned that mentoring sessions were helpful and helped to manage their stress

(mean 4.3 and 4.14) similar findings are also suggested by Shashikala et al [6]. The mentoring sessions helped them to overcome the anxiety of uncertainty of pandemic and offered solutions for handling stress which is similar to other studies Shashikala et al [6].

Mentoring helped them to become aware of the challenges in online learning and provided insights in overcoming them. This was expressed by students in other studies too [7]. Majority of students felt Mentoring sessions helped them towards academic focus, guided them to set and achieve their learning goals. Similar results were also observed by MD Shashikala et al [6]. The students' mentioned mentor was open for communication anytime and this helped them a lot in the time of ambiguity of pandemic, similar results also were seen in a study conducted by kukreja et al [8].

The student responses to the open ended question,

Challenges faced by the students during lockdown and Covid pandemic related to their wellbeing and academics included: Lack of concentration and focus on their studies in an online education, absence of face-to-face interaction and attention from teachers, lack of social interaction between classmates. Hence students were trying to manage their academic difficulties on their own without proper guidance, which was resulting in a sense of loneliness and alienation from the academic environment [9].

Discussion in groups is one of the best student-centred learning techniques, which are lacking in online instruction. The students also stopped studying with their classmates, which led to an increase in stress, anxiety, loneliness, and depressive symptoms. Further, students expressed their concern for the lack of access to study resources. As a result, they had to rely on online resources that were helpful but with some limitations. Despite the fact that many students had multiple technology devices such as mobile phones and laptops with internet access still few of them faced problems with broadband connections, affordability, data speed etc.

Likewise, many expressed the lack of practical sessions which are very important part of the study in medical school in enhancing

psychomotor skills. They also expressed state of anxiety, fear of isolation and frustrations. The causes of these being the concern about the health and well-being of family members. Furthermore, students also reported negative reporting by mass media and social media made the situation grimmer and fearful.

Thus, students experienced a lot of negative emotions like anxiety, fear, frustration, helplessness, feeling of isolation, depression, and mental stress due to reduced social interactions.

What students liked about the Online mentoring sessions: Majority of students responded positively to the various questions asked about mentoring in feedback. Faculty support has a significant impact on students academic and social well-being. Mentoring gives the students a sense of enthusiasm, decrease in mental worries, increased in interest in online education. Furthermore, students stated that mentoring offered solutions for managing stress during Covid lockdown and helped them to manage their emotions, gave them confidence, sense of connection and bond with the peers. The students felt that mentoring acted as a constant reminder for academic focus during pandemic. The students felt the mentor was open for communication which enabled them to freely discuss their difficulties (Table1).

Did online mentoring help your overall well-being and academic focus during the Covid pandemic, if yes how?: The results showed that majority of students (92.1%) found the online mentoring helpful, they have reported that regular online mentoring helped them to focus on academics, despite the uncertainty, mentoring helped in managing their negative emotions and promote their mental health. In addition, being confined at home during a pandemic can create a state of anxiety, fear, loneliness, depression, and frustration [8-9]. Online mentoring helped to reduce this stress and improve overall well-being. Similar results were observed in many studies [10-12].

How could the mentoring program be better?: Online education has been viewed positively and negatively by students in

various studies [13-15]. In our study we found many students suggesting increase in the frequency of the mentoring sessions to weekly sessions. Some students sought more academic assistance in the form of special mentoring sessions.

Limitations of our study:

1. Less availability of mentors as many were busy in covid duties.
2. Some students could not participate in the mentoring sessions since their families were affected with covid.

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Conflicts of interest: There are no conflicts of interest.

Conclusion

The primary goal of mentoring is not only providing academic support but also to ensure that the other factors like emotional, social and mental well-being, which can have a negative bearing on their academic performance are addressed. The online mentoring program instilled confidence, provided continuous motivation and kept the enthusiasm of mentees high to achieve their academic goals in the dreaded situation of pandemic. The results from our study emphasizes the importance of mentoring in MBBS first Professional year and encourages to extend such programs to future batches as well as to other professional years too.

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