Section: Pharmacology

Original Research Article

PERCEPTION OF MBBS STUDENTS TOWARDS MENTORING PROGRAM IN A MEDICAL COLLEGE IN KERALA- A CROSS-SECTIONAL STUDY

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ABSTRACT

Background: Medical students coming from diverse backgrounds, culture, language, economic and social status spend a period of five and half years of academic life in a new environment with academic workload, time constraints, examination burden and various training practices. Mentoring program provides a platform for the students to discuss matters that inspires their professional and personal development. Study's objectives were to assess the perception of MBBS students towards mentoring program and to identify the perceived benefits. **Materials and Methods:** A cross-sectional study was conducted among all the phases of medical students of SNIMS. Students consented to participate were invited to complete a peer-validated questionnaire distributed via Google Forms which included demographic details and a mix of open- and closed-ended and Likert scale questions. **Result:** 358 students from age group of 18-29 years with 75.5% females and 42% from central Kerala participated in the study. 22.1% had prior exposure to mentoring. 97.5% necessitated mentorship in medical education. 89.10% chose guidance as mentoring. 5-point Likert scale questions on general perception on mentoring and mentor qualities had positive responses. 53.07% preferred reverse mentoring and 87.43% personal one to one meeting. 76.25% gained academic development. 65.6% preferred a monthly meeting. 61.7% prefer mentor of same gender. 43.9% were contented with the current mentorship program while others suggested improvements on various aspects. **Conclusion:** The responses from this study highlight the ways in which mentoring supports students and serve as indicators for assessing the effectiveness of the program.

INTRODUCTION

Pursuing a career in medicine is a dream for many students in India. Bachelor of Medicine and Bachelor of Surgery (MBBS) in India is not just a course, it is a path that leads to a profession of immense respect, responsibility and dedication. The Indian undergraduate medical degree, is one of the most rigorous programs worldwide, both in terms of syllabus volume and workload. Students pursuing this course often find it challenging, as they are expected to consistently perform well over five years, which can sometimes negatively impact their mental health.[1] Students coming from diverse backgrounds, culture, language, economic and social status spend their next five and half years of academic life in a new environment with academic workload, time constraints, examination burden and various training practices.[2]

Stress undergone by students during the medical course can vary from one individual to other. Medical students compared to general population demonstrate an increased prevalence of poor mental health with high rates of stress, anxiety, distress, depression, burnout and suicidal thoughts.[3] Among medical students in India, the pooled prevalence of depression assessed through standard screening methods was 40%, with a confidence interval ranging from 32%-47%.[4] Between 2010 and 2019, a total of 125 medical student suicides were reported in India.[5,6] Academic stress accounted for 45.2% of the cases, while mental health issues contributed to 24% of the cases.[6]

Many medical undergraduate students struggle to find mentors who are available to address their academic and personal concerns. This issue is primarily due to the rising number of students without a corresponding increase in faculty members, which restricts meaningful student-faculty interaction.[7] Moreover, faculty are often occupied with heavy clinical workloads and academic duties,

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leaving them with limited time to engage in effective mentoring.[8]

Students may also hesitate to seek mentorship unless a formal program is in place or the institution fosters a culture that encourages mentor-mentee interactions.[9] Regardless of the reason, the absence of mentorship makes it harder for students to navigate the challenges of medical college effectively. Mentoring program provides a platform for the students to discuss matters that inspires their professional and personal development with their mentor.[10]

With increasing awareness of the potential value of mentoring, programs are being established at medical schools worldwide.[11] Recognizing the need for structured support, the Kerala University of Health Sciences (KUHS) has implemented the Students Support and Guidance Programme (SSGP). This initiative aims to provide continuous mentoring and guidance to students, fostering their academic growth, emotional well-being, and overall personality development. Under this programme, students in our institution were divided into small groups of 10 students, and each group constituted a mentee group, which was assigned to a mentor from different specialties (pre-clinical, paraclinical, and clinical specialties). The number of students in each batch of MBBS admitted per year is one hundred and fifty. Through the SSGP, faculty mentors engage with students in a supportive and confidential environment, helping them navigate academic pressures, enhance life skills, and build resilience.[12] The mentors and mentees interacted with each other at least once a month during the program.

Rationale of the study

Mentoring plays a crucial role in shaping well-rounded, competent, and confident healthcare professionals of the future. The purpose of this study is to assess perception of MBBS students towards mentoring program.

In addition to improving professional identity formation, mentoring's benefits to students include improved confidence in specialty selection, increased overall career guidance and satisfaction, greater academic productivity, and improved networking in their fields of interest. The purpose of this study is to assess perception of 1st year MBBS students towards mentoring program.

MATERIALS AND METHODS

Research Question

How do medical students perceive the importance of mentoring program in their academic and personal growth?

Aims and Objectives

Primary Objective

To assess the perception of MBBS students towards mentoring program

Secondary Objective

To identify the perceived benefits and expectations from mentoring relationships

Study Design: Cross sectional study

Study Population

Inclusion Criteria

Undergraduate medical students in SNIMS

Students who are willing to sign the informed consent

Exclusion Criteria

Students who do not complete the questionnaire

Sample Size Estimation

The following formula was used for sample size estimation

"N=" "z2×p×" ("1-p")/"d2"

Were

N= required sample size

Z= Z score corresponding to confidence level (1.96 for 95% confidence)

P= Expected proportion of students with positive perception

D= margin of error

Based on a previous study by Kukreja et al, which reported that 94% of study population had positive response to mentoring program, sample size calculation was performed.[13] So, with expected proportion of 94% students with positive perceptions, 95% confidence and 5% margin of error, yielded a minimum sample size of 87 students.

Study Duration: 4 months

Obtaining Ethical Clearance approval = 2 months

Data collections = 1month

Data tabulation and analysis = 1month

Methodology

Students fulfilling inclusion/ exclusion criteria were enrolled in the study. A questionnaire, consisting of demographic, open ended, closed ended, semi closed ended, dichotomous and Likert scale questions were developed through literature review and was validated by peer review. The questionnaire, the informed consent and participant information sheet via Google forms were sent to all study participants via email or WhatsApp They were requested to fill up the questionnaire. The questionnaire contained a set of questions which would assess their perception and experience about mentoring. The forms which are completely filled by the participants were accepted. These forms will be saved in the Google drive for further study purpose.

Ethical considerations

The study commenced after getting approval from the Institutional Research and Ethics Committee (IEC/118/89). Students were explained regarding details of the study and informed consent were obtained from them. Confidentiality was maintained through Anonymity of the Questionnaire.

RESULTS

A total of 358 students participated in the study. Age distribution is depicted in Figure 1. Mean age 21.82.

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Table 1: Likert scale questions regarding general perception of mentoring and mentor qualities is described

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Mentoring is important for academic growth	106 (29.6%)	209 (58.4%)	33 (9.2%)	3 (0.8%)	7 (2%)
A structured mentoring program should be a part of MBBS curriculum	120 (35.5)	194 (54.2)	33 (9.2%)	4 (1.1%)	7 (2%)
Mentorship is an extra burden on me	1 (0.3%)	14 (3.9%)	79 (22.1%)	186 (52%)	78 (21.8%)
Mentor is approachable and easy to talk to	132 (36.9%)	175 (48.9%)	40 (11.2%)	10 (2.8%)	1 (0.3%)
Mentor knows me by my name	131 (36.6%)	163 (45.5%)	52 (14.5%)	9 (2.5%)	3 (0.8%)
Mentor provides emotional support and encouragement	90 (25.1%)	203 (56.7%)	56 (15.6%)	7 (2%)	2 (0.6%)
Mentor suggests appropriate resources and ideas to enhance my academic performance	90 (25.1%)	214 (59.8%)	45 (12.6%)	8 (2.2%)	1 (0.3%)
I want to continue with the same mentor for the next year.	89(24.9%)	155 (43.3%)	95 (26.5%)	16 (4.5%)	3 (0.8%)

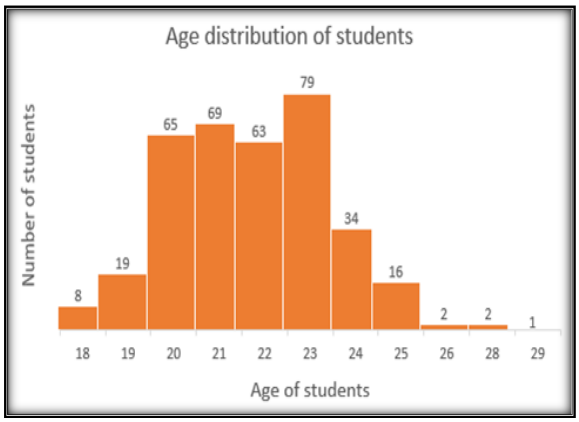

Figure 1: Age Distribution

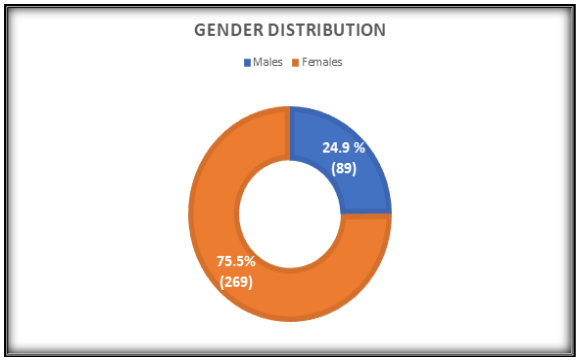

Figure 2: Gender distribution

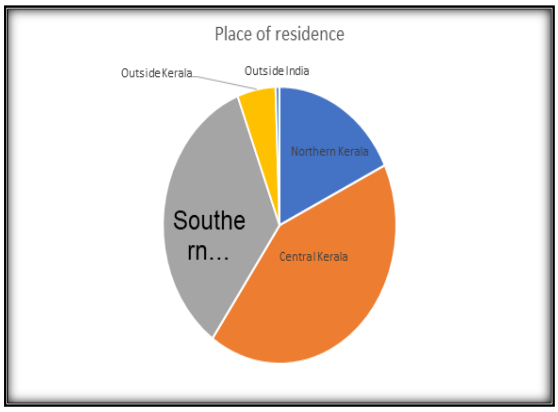

Figure 3: Place of residence of students

79 (22.1%) students have participated in a formal mentoring program before joining the course. 349 (97.5%) students think that mentorship is necessary in medical education.

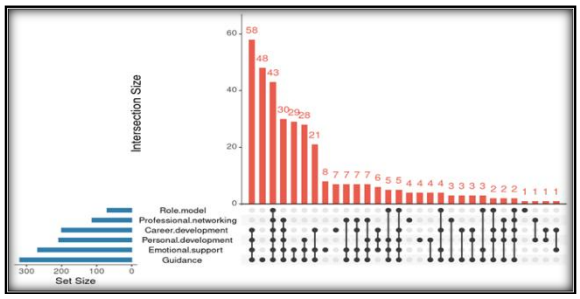

Figure 4: shows how students define mentorship based on the semi closed questions with multiple responses that includes guidance, role model, emotional support, personal development and professional networking.

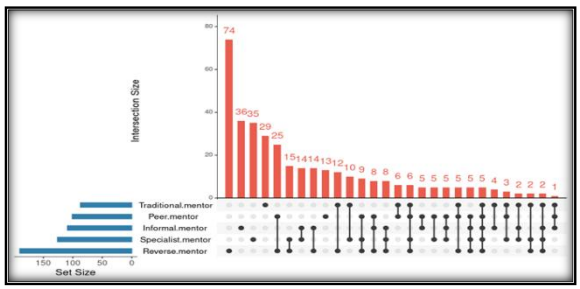

Figure 5: shows the preferred style of mentoring by the students

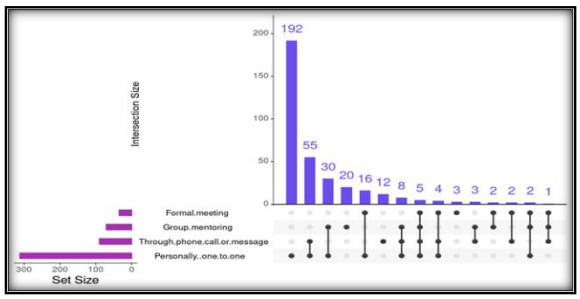

Figure 6: explains the mentor mentee meeting styles preferred by the students

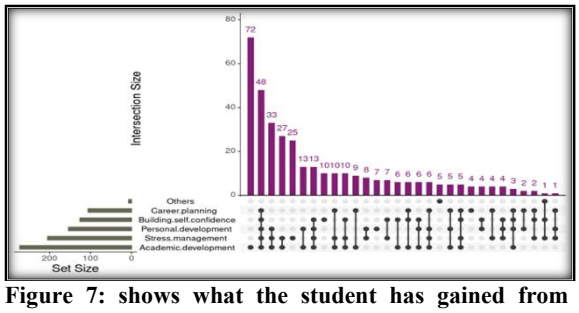

Figure 7: shows what the student has gained from mentoring

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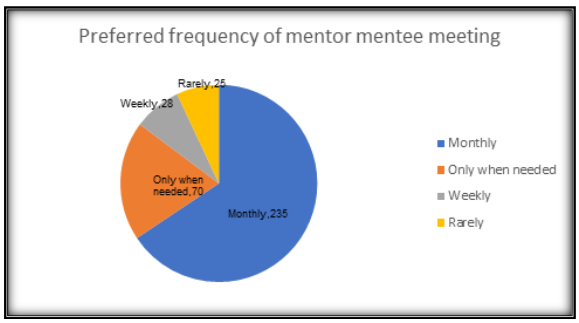

Figure 8: shows the preferred frequency of mentor mentee meeting by the students

221 (61.7%) students prefer mentor of same gender whereas 137 (38.3%) students did not have any gender preferences.

When an open-ended question about changes that would improve the mentoring program were asked to students, 157 students (43.9%) responded that they were contented with the mentorship program. 37 students (10.3%) suggested that mentors need to be more interactive. 33 students (9.2%) wanted to increase the frequency of meeting more than once a month, while 28 students (7.8%) want to meet mentors only when needed. 17 students (4.7%) expect their mentors to be more committed to mentoring rather than a program. 15 students (4.2%) expressed their opinion on choosing the mentor by themselves. 11 students (3.1%) wanted to have a fixed time for meeting with the mentors and 11 students (3.1%) suggested an organised and structured mentoring.10 students (2.8%) wanted one to one addressing, 7 students (2%) needed mentoring beyond their academic concerns, 7 students (2%) felt strict monthly meetings need to conducted and 5 students (1.4%) raised that they need more time for mentoring sessions. 4 students (1.1%) felt that an orientation to be given to students regarding mentoring whereas 3 students (0.8%) felt that training of mentors is needed. 3 students (0.8%) wanted to have same mentor throughout the course and 2 students (0.6%) would prefer to have mentoring via online or phone calls rather than personal meeting. 6 students, each of them (0.3%) wanted to build a mentorship community, sessions outside the college working hours, increase accessibility, change mentor at least once a year, group sessions and more academic support respectively.

DISCUSSION

This qualitative study explored the perceptions and experiences of MBBS students across all phases in a medical college in Kerala, based on their responses to a Google Form survey on mentoring. Although every student was assigned a mentor, only 358 out of 700 students participated in the study (response rate-51.14%).

Age distribution in our study ranges from 18 – 29 with a mean of 21.82 compared to study by Pölczman et al,[2] where participants came from the 20–24 age group with a mean of 22.04. In terms of gender distribution, our study included 24.9% males and 75.5% females, which closely aligns with the study by Kamarudin et al where 75.65% of participants were female.[14]

Findings from the study by Weka et al,[15] indicate that a substantial proportion of students had prior experience with mentoring while in our case 22.1% only have participated in a formal mentoring program before enrolling to medical school. Perception of students for requirement of mentorship in medical education was positive in 98% students in a study by Dave et al,[16] similar to 97.5% in our study The roles of mentors highlighted by Ssemata et al,[17] including providing career, academic, and personal guidance, along with motivation and encouragement were similarly reflected in the findings of our study.

In a study by Waseem et al,[18] communication with mentors was reported as easy by 58% of participants, with an additional 34.7% strongly agreeing which is 48.9% and 36.9% respectively in our study. Nearly 42.66% of participants agreed that their mentors should be recommended for future personal and professional development programs which is similar to our result of 43.3%. A study by Sonawane et al,[19] 82% felt emotional support as same as our study. About 94% of the students in the study conducted by Shilpa et al,[20] opine that mentoring is required and 6% of them do not want mentoring sessions to be conducted. While in our study 22.1% has neutral opinion, 3.9 % agrees and 0.3% strongly agrees that mentoring is an extra burden. In a study by Sherikar et al,[21] 93% agrees and 7% strongly agree that their mentor knows them by their names whereas in our case only 45.5% agrees and 36.6% strongly agrees to it. 59.5% of mentees agreed that mentor should be the same for entire course Dipmala et al in our study it was 68.2%.[22]

The majority of the students in the study by Udhayakumar et al,[23] prefer to have a specialist mentor in addition to reverse mentoring was also observed in our study. About 79% of the students preferred one-to-one mentoring, 5% of the students preferred group mentoring, and remaining 16% of the students preferred both one-to-one and group mentoring in a study conducted by Shilpa et al.[20] Whereas our study showed 54 % (192 students) preferred one to one session than 5.6% (20 students) on group mentoring. This may be because of the individual attention the mentee gets compared to group mentoring even though it is more time consuming.[24]

71.33% of participants in Waseem et al,[18] study agreed that mentorship helped them improve their academic performance which is only 59.8% in our case. Kalen et al,[25] reported that the mentor programme had facilitated their professional development and 63% that it had facilitated their personal development compared to 76.25% academic development and 43.01% personal development in our study. The same study reported that 62% had increased their self-confidence because of mentoring.

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Verma et al (8) 33.33% was able to build confidence which is similar to our finding of 35.19%. Fallatah et al,[26] found that 43.82% students agreed on Career planning as a gain from mentoring compared to 29.60% in our study.

In a study by Shilpa et al,[20] about 38% of students opted for monthly once mentoring, 57% after each internals, and 5% of students preferred mentoring once in 6 months. While in our study it was 65.6 % who opted for monthly meeting followed by 19.6% who wanted to meet mentor only when needed, 7.8% on weekly basis and 7% rarely need any meeting.53% students in the study by Jayalakshmi et al,[27] preferred mentor of the same gender as 61.7% in our study.

To assess gaps in the mentoring program, we asked students about changes that would improve mentoring program, their responses aligned with the findings of Kusner et al,[28] and Waseem et al.[18] Fallatah et al,[26] 46.48% non-committed mentors assigned to students. In our studies only 4.7% wanted their mentors to consider mentoring beyond a program. In a study by Dave et al 85.22% felt that preference regarding the selection of mentor should be given to the students, while this opinion was expressed by only 4.2%.[16]

A major strength of this study is the inclusion of medical students from all years of study, providing a comprehensive understanding of how mentorship needs and preferences evolve across different stages of medical training. While most existing studies have been conducted in North India, and those from South India have primarily focused on first-year students, our study aimed to explore the expectations of mentees within the structured mentoring program implemented by KUHS. By elucidating students' mentorship expectations, this study provides a foundation for enhancing the quality of longitudinal mentoring programs.

Limitation of the study: This study did not assess the long-term outcomes of the mentoring program, nor did it employ an experimental design to evaluate its effectiveness. Furthermore, the perceptions of mentors regarding their mentees, as well as their willingness to volunteer for the program, were not explored. Another limitation was the lack of provision for mentors or mentees to change their assigned partners in cases of dissatisfaction. Although the questionnaire included space for narrative remarks from respondents, deeper insights into their perceptions could be gained through more rigorous qualitative approaches, such as in-depth interviews or focus group discussions.

CONCLUSION

A considerable number of students in our study reported having had no prior mentorship experience. We expect that this study will provide a comprehensive understanding of expectations, benefits and challenges of mentoring programme. Overall, the research affirms the value of mentoring in medical education but also identifies areas for improvement.

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