

Mentoring Dynamics: Medical Student's Perspectives in a Private Medical College Setting

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Abstract

Background: Mentoring in medical education is an evolving strategy to support students' academic, personal, and professional development. In Pakistan, structured mentoring programs are still limited, and students face diverse academic, emotional, and social challenges during medical training. Understanding their perceptions can inform the improvement of such initiatives.

Objective: To evaluate medical students' perceptions of mentoring with respect to academic support, personal development, emotional and psychological support, and to compare perceptions between pre-clinical and clinical years as well as between genders.

Methods: A cross-sectional study was conducted at Rashid Latif Medical College, Lahore, after one year of implementing a formal mentorship program. Using a validated questionnaire (Cronbach's $\alpha = 0.67$; item range 0.62-0.93), data were collected from 300 MBBS students (150 pre-clinical; 150 clinical) through universal sampling. Responses were recorded on a five-point Likert scale. Independent sample t-tests were applied to compare mentoring domains across academic years and gender.

Results: Among participants (53.7% females, 44.7% males), most reported positive perceptions toward mentoring (pre-clinical: 45.3-54.6%; clinical: 45.6-63.8%). Academic support was the most highly endorsed domain (46.6-68.7% pre-clinical; 50.6-75.4% clinical), particularly in receiving constructive feedback. Personal development was positively perceived by 25.4-64.7% (pre-clinical) and 34-60% (clinical), while emotional/psychological support was endorsed by 34-74.6% and 26-69%, respectively. No statistically significant difference was observed between pre-clinical and clinical students across domains ($p > 0.05$). Gender comparison showed significant difference only in academic support ($p < 0.05$), with females reporting greater benefit.

Conclusion: Medical students generally perceived mentoring positively, especially regarding academic support. While no difference existed between academic years, female students benefited more in terms of academic support. Formal mentoring programs should be expanded in Pakistani medical colleges, with greater emphasis on personal, emotional, and career-related guidance.

Keywords: Mentoring, Medical Education, Academic Support, Medical Students, Pakistan.

INTRODUCTION

The relationship between a mentor and a mentee is called "mentoring" where an expert person (mentor) guides, helps, and supports an inexperienced and a junior person (mentee), during his period of education and training. In mentoring, a senior and experienced person invests his knowledge, time, and resources to upgrade the junior person.¹ This mentor-mentee relationship benefits them through greater productivity, career satisfaction, and personal gratification² Several national and international studies have been conducted to evaluate the perception of

mentoring in medical students.^{1, 3, 4, 5, 6} Students' perception of a mentoring program in colleges has a positive impact. To make this relationship successful both mentor and mentee's active participation and motivation are needed. Many students perceived that they got social and psychological support from mentoring. Some studies showed that mentoring programs help the students to develop a positive attitude, good communication skills, problem-solving skills, and role modeling.¹ Many researchers extensively evaluated the role of mentoring programs for medical students. In order to

achieve competence, the medical college curriculum is usually designed to enhance medical skills, knowledge, and personal and professional development,⁷ which will produce talented, well-educated, and skilled physicians ready to fulfill their responsibilities with proficiency.

Due to awareness about mentoring benefits, it is now gaining a lot of attention in medical schools in Pakistan. Few medical schools in Pakistan have adopted formal and structured mentoring programs. Pakistan is a country with rich and diverse cultures. Every year different group of students from all over the country gets admission to medical colleges. They have to leave their native home and seek education in different cities. They have to live in hostels away from their families. In medical education, mentoring is needed at every stage of their career. In their first year of medical college, they face many challenges e.g. coping with new students in the medical school. Their major issues are settling into the college environment and hostels, examination fears, learning difficulties, and financial and social problems. They face psychological, emotional, and personal issues as well.⁸

OBJECTIVES

- ❖ The present study is conducted to explore student's perceptions of mentoring, including academic support, personal development, emotional and psychological support.
- ❖ To identify the difference in the perceptions of different domains of mentoring between two academic years (pre-clinical year and clinical year).
- ❖ To identify the difference in the perceptions between the genders.

METHODS

This cross-sectional study was conducted at Rashid Latif Medical College, Lahore, Pakistan. This study was approved by IRB of Rashid Latif Medical College (RLMC). This study was conducted after a year of formal mentorship program at RLMC. Adapted validated questionnaire with overall Cronbach's alpha of 0.67 and individual item ranged from 0.62-0.93 was used as an instrument for quantitative data (Lian, Ommar et al).¹ The name of the instrument was not mentioned in the literature. The questionnaire consists of different domains like overall perceptions of mentoring program, perception about

academic support, personal development, emotional and psychological support. There were 23 items in the questionnaire. The questionnaires responses were based on five likert scale (Strongly agree, Agree, No opinion, Disagree, Strongly disagree). Samples were collected by universal sampling technique. After taking consent, demographics of participants were determined and confidentiality was maintained. A total of 300 undergraduate students from Pre-clinical (2nd year MBBS) and clinical years (4th year MBBS) were included in this study. This comprised of 150 students in each class. The reason to include 2nd year MBBS, is that they have only one year experience of mentoring, they have not yet acclimatized with the clinical year mentors and clinical rotations and they have different experiences as new comers in the college. The reason to include 4th year MBBS, is that they have three years mentoring experience, they have acclimatized with the clinical year mentors and they were exposed to clinical rotations as well. Students who were not present at the day of sample collection and didn't give consent were excluded.

RESULTS

In the current study, a total of 300 medical students participated, there were more female students 53.7% as compared to male 44.7%. 150 students from each class 2nd year MBBS, represented pre-clinical year, 4th year MBBS represented clinical year. The age range was 22-24 years. The questionnaire consists of different domains like overall perceptions of mentoring program, perception about academic support, personal development, emotional and psychological support. The positive perception was calculated by the sum of percentages in response to "Agree" and "Strongly Agree". No Opinion was considered a neutral perception. Only positive perception was calculated to arrive at frequency. The majority of the participants had a positive outlook toward mentoring program with a range of percentages from 45.3% to 54.6 % in pre-clinical year and 45.6% to 63.8% in clinical year. According to students the most significant element of this program was that it helped them to develop a positive attitude. At a sub-component level, the majority of the students agreed that they received academic support with a range of 46.6% to 68.7% in pre-clinical year and similarly 50.6% to 75.4% in clinical year from their mentors. The most

significant element in this domain was that mentors analyzed their results and gave constructive feedback and advised them to improve their academic performance. While the least significant element was that the mentors referred them to a resource person. Pre-clinical year with a range of 25.4% to 64.7 % and clinical year with a range of 34% to 60% agreed that they had gained personal development. The most significant element in this domain was that the mentors assisted them to identify their strengths and weaknesses. At the same time, they didn't upgrade the students' abilities. In the aspect of emotional and psychological support gained from the program. Pre-clinical year agreed to this with a range of 34% to 74.6 % and clinical year in a range of 26% to 69 %. The minimum responses were received in the

elements regarding questions about discussing personal issues and counseling on personal issues. Respondents agreed that their mentors gave encouragement and support during challenges and they reinforced their good achievements.

In comparison between two years of medical students, there was no statistical difference in the overall perception of mentoring. Under different domains like academic support, personal development, and emotional and psychological support, there was also no difference (Table 1). An independent sample T-test was applied for comparison between the different domains in both years. While the comparison between the genders showed statistical significance in academic support only ($p < 0.001$) (Table 2).

Table 1: Perception Regarding Mentoring Between Pre-Clinical & Clinical Years.

Domains	N	Pre-clinical year	Clinical year	p-value
Overall Perception about Mentoring	148	15.99±4.40	16.78±3.96	0.105
Academic Support	150	13.55±4.03	13.94±3.02	0.304
Personal Development	150	21.44±5.79	22.60±8.97	0.183
Emotional and Psychological Support	150	22.99±5.76	22.39±6.80	0.410

In the current study, Independent Sample T-Test was applied and P-value came out to be > 0.05 symbolizing that there was NO

statistically significant difference between the different domains of mentoring among two academic years.

Table 2: Perception Regarding Mentoring Between Genders.

Domains	Male	Female	p-value
Perception about Mentoring	16.17±4.30	16.57±4.16	0.421
Academic Support	13.28±3.81	14.12±3.33	0.046*
Personal Development	22.97±9.38	21.31±5.56	0.074
Emotional and Psychological Support	22.77±4.97	22.57±7.26	0.790

Independent Sample T-Test was applied which showed that the P-value for mentoring domain for academic support came out to be $< 0.05^*$ rendering it to be significant in both genders. While other domains scores of mentoring were not statistically significant.

DISCUSSION

In this study student of both, groups perceived mentoring as a beneficial program for them. The majority of the participants had a positive outlook toward this mentoring program with a range of percentages from 45.3% to 50.7 % in pre-clinical year and 45.6% to 63.8% in clinical year. This mentorship program which was started in RLMC fostered affirmative changes in terms of

academics. The same was also observed in a study by Usmani and Omaeer.⁶ The main purpose of mentoring program at RLMC, is not only to make students excel in their academics but to support mentees' personal, emotional and psychological well-being as well. Researchers like Frei, Stamm et al.⁹ and von der Borch, Dimitriadis et al.¹⁰ have the same findings regarding mentoring programs.

In terms of the overall perception of mentoring, students of clinical year perceived that mentoring has improved their communication and problem-solving skills which were not seen in students of pre-clinical year. This was in concordance with a previous study by Lian et al. This might be due to long mentoring relation which improved their

communication and problem-solving skills. Same results were also reported by Usmani and Omaeer.⁶ Both groups in this study agreed that this program develops a positive attitude in their personalities and helps them to gain support in challenges. Response to the provision of positive role models through mentoring was deficient in both years. This could be overcome by conducting workshops like communication and leadership skills for the faculty who wanted to be voluntary mentors. Literature shows that to become a good role model for students, a doctor has to build a good rapport with the learners and create a positive and supportive learning environment.

In this study response regarding academic support was very good in both years. Respondents in both the years agreed that mentoring gave them academic support and mentors advised them on how to improve their academic performance. This was in concordance with the previous study by Usmani and Omaeer.⁶ In contrast to a study by Lian, Ommar et al.¹ our respondents gave a positive response about mentor referring them to a resource person when required. Respondents agreed that mentors analyzed their results and provided constructive feedback to improve their results. Enhancement of academic performance was also seen in another study by Meinel, Dimitriadis et al.¹¹ The study by Stenfors-Hayes, Kalén et al.¹² classified career counseling as a mentoring goal, which was not addressed by our students. The response was less than 50% in both groups which was in contrast to the study by Lian, Ommar et al.¹ It might be because majority of the mentors were from basic departments and they had less experience with emerging careers in the medical field. Students also reported that they received constructive feedback in their academics which would help them to become lifelong learners. This was one of the main objectives of this program.

In response to questions regarding personal development, the response was less than 50% which was in concordance with the previous studies by Lian, Ommar et al.¹ While the response was more than 50% of the questions regarding mentors' ability to identify their strengths and weaknesses and inculcate reflection in them. Reflective practice is an essential attribute for health professionals. This was made possible by giving them

feedback after every failure and achievement. The same findings were reported by Kalén et al.¹³ In this study, the perception regarding personal development did not get good responses. Questions regarding emotional and psychological support, the responses were also less than 50%. Mentees did not discuss and take advice on personal problems. This may be due to their limited meetings with their mentors, the same responses were seen in the study by Lian, Ommar et al.¹ In this study students considered that their mentors are good listeners (73.3% in pre-clinical year and 69.3% in clinical year) and they reinforced good achievements, which was also in concordance with the previous study by (Lian, Ommar et al.¹ The response was more in pre-clinical year (74.6 %) than in clinical year (64%) which showed that in the early years of medical college they needed more emotional and psychological support from their mentors. The mentors at this stage provide guidelines, encouragement, and support which is needed by the newcomers. This was also in concordance with the study by Usmani A. A good mentor acts as a role model for his mentees in facing challenges in their day-to-day experiences.

In this study, more respondents agreed that their mentors give emotional and psychological support which was similarly reported by Lian, Ommar et al.¹ Different authors also indicated that the students entering medical school faced many challenges in terms of academics, socially and psychologically, so they needed more guidance and support as compared to clinical year students.¹⁴ The clinical year students needed more support and guidance from clinicians in their career selection which was also mentioned by Kilminster, Jolly et al.¹⁵

The present study indicated that mentoring implementation has achieved its objectives in terms of academic support, developing a positive attitude, improving communication and problem-solving skills, and giving emotional and psychological support to some extent. A review of the literature supports the current study. According to this study, this mentoring relationship is more professional than a casual one. A study by Aagaard and Hauer¹⁶ indicated that this relationship should be kept professional to prevent their emotional attachment which will be difficult to handle. So in this study and study by (Lian, Ommar et al,¹ they don't consider their mentor as friends.

This might be due to their age difference and their relationship.

In this study, we found no statistical difference while comparing both groups (pre-clinical year and clinical year) regarding all four domains. Although in terms of academic support, there was a statistically significant difference between the two genders. This could be due to the support given to them by mentors which were not provided to them before. It is found that this platform provided support and academic help to female students. Overall mentoring provides benefits to students from clinical year and pre-clinical year. They both have gained more benefits in terms of academics. The pre-clinical year students get more support in an emotional and psychological domain as compared to clinical year, while clinical year students get more improvement in their communication and problem-solving skills.

Limitation of the Study

- ❖ Limited institutions in this country have proper mentoring programs that could have a limited depiction of the situation.
- ❖ Current study was restricted to one medical institute in Lahore, hence sample size was small so the results cannot be generalized to other medical institutes where mentoring is being implemented. Large sample size would be needed to validate the findings in more detail.
- ❖ The findings of this study were based on the perception of two classes only. It might have biased the results towards a positive perception of mentoring.
- ❖ Perceptions of mentors have not been assessed because of time limitations. We certainly include future research to make up for this deficiency.

CONCLUSION

The majority of mentees had a positive perception of mentoring. There was also no difference in the perception of mentoring between the two academic years. Female students benefited from academic support more than the male students.

Recommendations

- ❖ Formal mentoring programs should be implemented in all medical colleges in Pakistan. Mentoring not only benefits

student as an individual but the organization as well.

- ❖ In the long run, longitudinal mentoring programs focusing on professionalism, leadership skills, career counselling, and inculcating ethical values should be started.
- ❖ A student support unit or peer support program should provide psychological, mental, emotional, and social support to students coping with difficult situations.
- ❖ Mentoring for career support should be included in the program. This can be done by having more mentors from the clinical setup.

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Quantitative Instrument

S. no	PERCEPTION ABOUT MENTORING	SD	Disagree	NO	Agree	SA
1.	This Program Enables Me To Gain Support On Any Challenges Faced					
2.	This Program Helps Me To Develop A Positive Attitude.					
3.	This Program Provides Me With Positive Role Models					
4.	This Program Helps Me To Develop Good Communication Skills.					
5.	This Program Assists Me In Problem Solving Skills.					

S. no	ACADEMIC SUPPORT	SD	Disagree	NO	Agree	SA
1.	My mentor assists me to understand the MBBS curriculum.					
2.	My mentor refers me to a resource person when necessary.					
3.	My mentor analyses my examination results and provides constructive feedback for reflective review.					

4.	My mentor advises how to improve my academic performance					
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S. No	PERSONAL DEVELOPMENT	SD	Disagree	NO	Agree	SA
1.	My mentor helps me to upgrade my abilities					
2.	My mentor builds confidence in me.					
3.	My mentor is able to identify my strengths and weaknesses.					
4.	My mentor provides support in setting career goals					
5.	My mentor helps me to self-assess through reflection.					
6.	My mentor stresses on commitment to lifelong learning.					
7.	My mentor is a role model to me.					

S. No	EMOTIONAL AND PSYCHOLOGICAL SUPPORT	SD	Disagree	NO	Agree	SA
1.	My mentor gives encouragement and support for the challenges faced.					
2.	My mentor listens attentively to me when I discuss my difficulties.					
3.	My mentor reinforces my good achievements.					
4.	My mentor made time for me besides the regular meetings.					
5.	My mentor is like a friend to me.					
6.	My mentor is trustworthy and I feel safe discussing personal matters with him/her.					
7.	My mentor counsels me on my personal problems.					