ORIGINAL ARTICLE

Effect of Mentoring on Professional Development of Medical Students Medical Students

Shamaila Sharif¹, Abdul Ghani Waseem², Wajiha Shadab³, Rehan Ahmed Khan⁴, Saadia Sultana⁵

ABSTRACT

Objective: To determine the perceptions of medical students about the effect of mentoring on professional development and to identify the problems faced during mentoring sessions in a private medical college. **Study Design:** It was a qualitative phenomenological study.

Place and Duration of Study: This study was conducted at Islamic International Medical College Rawalpindi. It was completed in 6 months i.e., from Feb. 2016 to 31 July 2016.

Materials and Methods: It was a qualitative phenomenological study. A sum of 32 students were included in this study, 16 from third year MBBS and 16 from final year MBBS. Students from each class were divided into two groups, each group comprising of 08 students. Two Focus Group Discussion were arranged. Focus Group Discussions were audio recorded, transcribed and analyzed by thematic analysis with NVIVO version 11.

Results: Majority of the students found mentoring useful and a supportive program for their professional development, self-grooming, self-confidence and it helped them to increase their knowledge. Students were of the opinion that mentoring sessions had been helpful for improving their behavior with the patients. Students also highlighted that these sessions had positive effects on their professional and religious values. Students identified certain problems faced during these sessions like irregularity in mentoring sessions, frequent change of mentors, lake of advice and guidance on their career development by the mentors.

Conclusion: Medical students observe that mentoring has useful and beneficial effect on their professional development. However, they have highlighted certain shortcomings/problems of mentoring program run in IIMC. These deficiencies include lack of a structured mentoring program, irregularity in mentoring sessions and change of mentors.

Key Words: Mentor, Mentee, Perceptions, Carrier Planning, Carrier Development, Professionalism, Professional Development.

Introduction

The conventional characterization of a mentor is a reliable and honest counselor. A mentor has the capability to direct, monitor and provokes his or her mentee by increasing his or her acquaintance, responsiveness, and vision. Mentors are an influential force for developing successful professionals. Medical faculty having mentors often viewed that mentoring positively facilitates the personal development.^{1,2,3} Effective mentoring surges carrier contentment in mentees. It reduces

^{1,3,5} Department of Gynecology/Medicine ² /Surgery ⁴
Islamic International Medical College
Riphah International University, Islamabad
Correspondence:
Dr. Shamaila Sharif
Associate Professor
Department of Gynecology
Islamic International Medical College
Riphah International University, Islamabad
E-mail: shumaila.sharif@riphah.edu.pk
Funding Source: NIL; Conflict of Interest: NIL
Received: December 10, 2018; Revised: September 04, 2019
Accepted: September 06, 2019
100

the faculty encumbrance, in the meantime enabling professional cooperation and collaboration. It is constructive for academic institutions to introduce formal mentoring program, offer maintenance and organize staff improvement for mentors^{4,5,6} Mentoring skill is a respected possession for the faculty of academic medicine. It helps in shaping the professionalism of next group of physicians. Mentors are basically role models acting as directors, in order to help students for their personal development and carrier planning over time.^{7,8} Mentors can be contributory in transmission of overt academic understandings necessary to master curriculum content. Essentially, they can improve implied understanding about the "hidden curriculum" of ethics, values and the art of medicine not demonstrated from texts. Mentors also provide affectionate support and reinforcement.9,10,11 There was a need for formal mentoring program which socializes young doctors to meet their professional needs.^{12,13,14,15}

Mentoring at Islamic international medical college,

Riphah International University is based on group mentoring where one senior and one or more junior mentors are assigned a group of students. The mentors are selected from the faculty and management staff of Islamic international medical college. Once selected, the mentors were trained and had to undertake special workshops on mentoring. The faculty members who had completed the "Post graduate Diploma in professional ethics and teaching methodology" for faculty members are preferred to take up mentoring. Social sciences department run strategic vision workshop of medical students in the first semester to help understand life vision. This study will help us to explore the usefulness and effectiveness of mentoring program run for undergraduate medical students. The valued responses compiled by this research will help to highlight the importance of mentoring program and the improvements required to make it more useful and effective. A study was planned to determine the perceptions of medical students about the effect of mentoring on professional development and to identify the problems faced during mentoring sessions in a private medical college.

Materials and Methods

A qualitative phenomenological study was conducted at Islamic International Medical College Rawalpindi from Feb. 2016 to 31 July 2016 after an approval from ethical review committee of Riphah International University. Focus group discussion method was used. Students who attended the mentoring classes in their previous sessions were included in the study. Total 32 students were included, 16 from third year MBBS and 16 from final year MBBS. Students from each class were divided into two groups, comprising 08 students in each group. In this study, maximum variation sampling technique was used. Two Focus Group Discussions (FGDs) of MBBS students, were conducted to explore their understanding of the effectiveness, utility and problems of the mentoring sessions conducted in our institution.

Data was collected using questionnaire consisting of leading questions about their perceptions, attitudes and opinions. The group's composition and discussion was carefully planned to create a nonintimidating environment. Data was transcript and coding was done using NVIVO version 11. Themes were selected and subthemes were identified. Six steps were followed for data analysis and interpretation. Transcripts were coded and themes confirmed. After identifying open codes, axial coding performed to find out subthemes. Selective codes were identified, and interpretation of results was done.

Results

Majority of the students found mentoring useful and a supportive program for their professional development, self-grooming, and self-confidence. Students agreed that it helped them to develop vision and increase their knowledge about life and living. Students were of the opinion that mentoring sessions had been helpful for improving their behavior with the patients in the hospital. Students highlighted that these sessions had positive effects on their professional duties and religious obligations and improved behavior towards peers, seniors and patients. They felt self-motivated and amended capabilities of teamwork and tolerance. Students identified certain problems faced during these sessions like irregularity in mentoring sessions, frequent change of mentors, lack of advice and guidance on their career development by the mentors.

The following themes and sub themes were extracted from the group discussion:

Medical Students' Perceptions Themes and Subthemes

Themes	Subthemes
Structured classes	In sequence for professional development
	Practical points
Classes	Regular classes improve its
schedule	effectiveness
	Proper scheduling is required for number of classes
	All time mentoring is not good.
Role models	Not role models
Personal grooming of	 Mentoring helped in self- motivation
students	More knowledgeable
	Learn about how to behave
	Improved behavior towards peers
	Improved behavior with patients
	Enhanced team work
Professionalism	 Learn to improve attitude towards patients
	More responsive for profession
	Learn ethical aspect
Islamic values	More knowledge
	Improved ethics
Carrier	No help
planning	

As a result of two focused group discussion among the students, following seven major themes were identified.

Structured Mentoring Program

Students expressed that mentoring classes should be with the same mentor and on regular basis. They claimed that a structured program will ensure continuity and establish secure relationship of mentees with the mentors. Students perceived mentoring as a personal relationship with faculty member engaged in helping the student in order to improve student's personal and professional prophecy.

Respondent 1: I don't feel any improvement but this can be improved by making these sessions more structured.

Respondent 2: Mentoring sessions should be more frequent. May be for a limited time period but if teachers come prepared, it will be motivating.

Respondent 3: For better results, formal mentoring is necessary.

Respondent 4: Only two sessions were conducted last year, which I think are insufficient even if we consulted our senior teachers many times but these were informal meetings and teacher cannot assess us.

Regular Mentoring Classes: Students reflected that mentoring classes were interrupted and insufficient for any impact on them. There is need for regularity and punctuality for these classes so that program implementation is ensured and proper feedback can be taken. Mentors also value the time they spend and mentee achieve guidance in most of the aspects of life through this affiliation.

Respondent 1: These sessions were insufficient. Mentoring sessions should be at least one after every two months.

Respondent 2: Number of sessions during the year was insufficient. We need more sessions with trained mentors for better results.

Respondent 3: Actually, mentoring classes should be in succession and on weekly basis for may be a limited time period.

Respondent 4: We need regular sessions to avail benefits of mentoring.

Mentors as Role Models: Students emphasized that if mentors are role models, it may be a better setting for them. It is evident that mentor's personality has

impact on their mentees. As mentors convey wisdom indirectly through their approaches, outlooks and concepts, they have ability to engage with students at all levels and tolerate and guide the emotions of their mentees. On the other hand, it is also important that students make independent decisions and have their own experiences. It fosters their personality development and they work with their personal struggles.

Respondent 1: Mentors were not role models so they did not give us practical points which are impressive enough to improve ourselves.

Respondent 2: We can improve these classes by having role models as mentors.

Respondent 3: These can be further enhanced by providing us with trained mentors' because everyone cannot be a mentor.

Personal Grooming: Students involved in mentoring observed that their mentoring classes improved their tolerance, their understanding of teamwork and vision about life. They were able to formulate and express their vision of life according to their requirements and internal satisfaction. It also increased their interest in research work as they feel it easy and accessible to research on topics of their own interest.

Respondent 1: We discuss different aspects of life and it helps us in improving our attitude towards patients, empathy and awareness about religion.

Respondent 2: We discussed many queries with our teachers and after reading book Adab e zindagi, we feel improved ourselves about daily life activities and attitude towards patients.

Respondent 3: It added a little to our ethics.

Respondent 4: May be we need separate classes on ethics.

Improving Professionalism: Many of the students admitted that mentoring helped them in understanding professionalism and it guided them to act upon its different aspects.

Respondent 1: Mentoring helped us improving ourselves as a good doctor. It told us how we can be a doctor not only concerned about diseases of the patients but also about their psychological issues and social problems.

Respondent 2: It improved our self-motivation and workplace working.

Respondent 3: It increased our knowledge.

Respondent 4: We have better communication with our peers.

Islamic Values: Students reflected that mentoring improved their knowledge about Islamic values. They discussed their queries with the respective mentors and it, in turn had an impact on their daily life activities and now they are more empathetic towards patients.

Respondent 1: It only gave us knowledge about Islamic values and did not give us practical points in team working.

Respondent 2: Yes, it improved our religious and moral values.

Respondent 3:

Respondent 4: But we feel deficient regarding practical points, how to improve our self? And need more guidance in this aspect.

Career Guidance: Students had the opinion that their mentors were not much concerned about their carrier planning and only a short time talk was conducted during their sessions. If their teachers come prepared, they may give them valuable support in this aspect as well and it may become easier for them to choose the carrier according to their aptitude.

Respondent 1: It does increase our confidence and helped us in our future plans.

Respondent 2: It increased our confidence but did not help us in our future plans.

Respondent 3: These classes were not so much concerned about our preparation of our carrier.

Respondent 4: It improved self-motivation but not carrier planning.

Discussion

In this study, conducted at Islamic international medical college, most of the students found mentoring supportive for professional development, self-grooming and confidence. Students reflected that these sessions fostered their professionalism and helped in improving their self-confidence. Mentoring sessions were effective for improving behavior towards patients. However, these sessions did not help them in carrier development. The religious impact of these classes had also been significant. They emphasized that there was effective role of mentors and regular sessions were required for making it more beneficial.

A structured program ensures continuity and establishes secure relationships of mentees with the mentors. In this study, the student expressed that proper structuring of the mentoring program would ensure proper program implementation. Similar results were found in a study that was conducted by Buddeberg Fisher Medteach 2006.¹⁸ The study showed that the majority of the mentoring programs lack a concrete structure, although the results of mentoring are promising, more formal programs with clear setup goals are needed.¹⁸ In this study, student expressed that decrease regularity and punctuality leads to decrease in the impact of mentoring classes on them. Similar suggestions were made in a study done by Boyle Preports on the development and assessment of mentoring programs. The study suggested that the sustained, involving relationships between mentor and mentee for best outcomes.¹⁹ It is evident that mentor's personality has impact on their mentee. In this study, a small number of students emphasized that if mentors are role models, they may guide better for their professional development. In a study by Allen TD, meta-analysis was used to review and synthesize existing empirical research concerning the career benefits associated with mentoring Comparisons of mentored versus non-mentored groups were made, the findings were generally supportive of the benefits associated with mentoring.²⁰ Students involved in the present study perceived that mentoring sessions helped students in their personal grooming, improving tolerance, understanding of teamwork and vision about life. They were able to formulate and express their vision of life according to their requirements and internal satisfaction. In a study by Ndwiga C, a qualitative assessment was conducted to assess provider experiences and perceptions about mentoring. Mentees reported improved knowledge, skills, self-confidence, and team work.^{21,22} Many of the students admit that mentoring helped them in overall understanding of professionalism as well as guided them to act upon its different aspects. Similar results are seen in a study by Sambunjak D, they found that mentorship was reported to have an important influence on personal development, career guidance, career choice, and research productivity, including publication and grant success.²⁴

Conclusion

Medical students observe that mentoring has useful and beneficial effect on their professional development. However, they highlighted certain shortcomings/problems of mentoring program being run in IIMC causing hindrance. These deficiencies include lack of a structured mentoring program, irregularity in mentoring sessions and change of mentors.

Mentoring program is being implemented in most of the Universities; there is need for a structured program according to local environment, facilities and social values. So that it fulfills our student's requirements and fosters their capabilities.

Regular classes with timely feedback would be beneficial for student's satisfaction and will make it more practical according to the needs of the students of different classes and gender.

For effective mentoring, faculty development is necessary through workshops and seminars so that they may perform mentoring in appropriate manner, and it will satisfy the students as well.

There should be incentives for faculty so that they do not feel it a burden and able to provide quality time for mentoring. Assessment and evaluation are integral parts of this program. For improvement in future and removing flaws in this program, assessment at regular intervals with involvement of all stakeholders of institution is integral part of this program.

REFERENCES

- 1. Anderson AJ, Sánchez B, McMahon SD. Natural Mentoring, Academic Motivation, and Values Toward Education Among Latinx Adolescents. Am J Community Psychol. 2019;63:99-109.
- Emery N, Hund A, Burks R, Duffy M, Scoffoni C, Swei A. Students as ecologists: Strategies for successful mentorship of undergraduate researchers. Ecol Evol. 2019; 9: 4316-26.
- Boutjdir M, Aromolaran AS, De Las Fuentes L, Boyington JEA, Arteaga SS, Jobe J, Jeffe DB, et al. Research Education and Mentoring Program in Cardiovascular Diseases for Under-Represented Junior Faculty From NHLBI SIPID/PRIDE. JAm Coll Cardiol. 2019; 73: 1861-65.
- Caruso TJ, Kung T, Piro N, Li J, Katznelson L, Dohn A. A Sustainable and Effective Mentorship Model for Graduate Medical Education Programs. J Grad Med Educ. 2019; 11: 221-5.
- 5. Fagenson-Eland EA, Marks MA, Amendola KL. Perceptions of mentoring relationships J Voc Behav 1997; 51: 29-42

.....

- 6. Straus SE, Chatur F, Taylor M. Issues in the mentor-mentee relationship in academic medicine: a qualitative study. Acad Med. 2009, 84:135-9.
- 7. Kram KE. Phases of the mentor relationship, Acad Manage J. 1983; 608 - 26460825
- Kram K, Elsabella LA. Mentoring alternatives: the role of peer relationships in career development Acad Manage J. 1985:7, 487-503.
- Rose GL, Rukstalis MR, Schuckit MA. Informal mentoring between faculty and medical students. Acad Med, 2005; 80: 344–8.
- 10. Connie E.Cell. Evolving as a Scientist and a Mentor. Epub . 2019; 177:510-13.
- 11. Newburger JW . Reflections on mentoring. Congenit Heart Dis. 2019; 14: 126-7.
- 12. Milton CL . Ethics with Mentoring. Nurs Sci Q. 2017; 30: 105-6.
- 13. Block M, Florczak KL.Mentoring: An Evolving Relationship. Nurs Sci Q. 2017; 30: 100-4.
- 14. Byks-Jazayeri C, Samuels E, Anderson EW, Ellingro VL. Implementing and measuring the impact of a clinical and translational research mentor recognition program. J Clin Transl Sci. 2018; 2: 312-20.
- Gagliardi AR, Perrier L,WebsterF, Leslie K, Bell ML ,Evinson W. Exploring mentorship as a strategy to build capacity for knowledge translation research and practice: protocol for a qualitative studyImplementSci. 2009; 1:14-98.
- 16. Jacobi M. Mentoring and undergraduate academic success: a literature review. 1991; 61:505–32.
- 17. Chao GT, Gardnerb P. Formal and informalmentorship: a comparison on mentoringfunctions and contrast with nonmentoredcounterparts. Pers Psychol. 1992, 45:619–36.
- Buddeberg-Fischer B1, Herta KD.Formal mentoring programmes for medical students and doctors--a review of the Medline literature. Med Teach. 2006 May;28:248-57
- 19. Boyle P, Boice B.Systematic Mentoring for New Faculty Teachers and Graduate Teaching Assistants.Innovative Higher Education 1998, 22:157-179.
- 20. Allen TD, Eby LT, Poteet ML, Lentz E, Lima L. Career benefits associated with mentoring for protégeé: a metaanalysis. J Appl Psychol. 2004; 89:127-36.
- 21. Thorndyke LE, Gusic ME, Milner RJ. Functional mentoring: a practical approach with multilevel outcomes. J Contin Educ Health Prof. 2008; 28:157-64.
- 22. Ndwiga C1, Abuya T, Mutemwa R, Kimani JK, Colombini M, Mayhew S, Baird A, Muia RW, Kivunaga J, Warren CE. Exploring experiences in peer mentoring as a strategy for capacity building in sexual reproductive health and HIV service integration in Kenya. BMC Health Serv Res. 2014 1;14-98.
- 23. Frei E , Barbara M S, Fischerr B. Mentoring programs for medical students A review of the PubMed literature 2000-2008.BMC Medical Education. 2010: 10:32.
- 24. Sambunjak D1, Straus SE, Marusić A. Mentoring in academic medicine: a systematic review. JAMA. 2006 Sep 6;296(9):1103-15.