Original article

Mentoring in Medicine: Introducing a structured programme in a Medical College in Delhi Ahmad A^1 , Elahi AA^2 , Nigam A^3 , Kapoor R^4

Abstract

Objectives: To evaluate the response to mentoring amongst medical students after introduction of a structured mentorship programme. *Methods:* This was a cross sectional study conducted at Hamdard Institute of Medical Sciences and Research, [HIMSR] New Delhi. A pre validated confidential questionnaire, designed as both open and closed ended questions was utilised to obtain responses from a sample size of 300 students, both males and females. Our questionnaire solicited the following information: clarity of the concept to the mentee, duration of being involved in the programme, preferred mentoring model, comments on intended benefits and those obtained, frequency of meetings, forms of communication used and preferred place of interaction. All students in 1st, 2nd and 3rd year at HIMSR who agreed to participate in the study were included. Results: A total of 231 students returned their questionnaire, making the response rate of 77%. Different forms of communication were being used, of which personal meeting was most frequent. Both males and females were contacting their mentors in person. Majority of students preferred the mentorship model to be 1:1 and faculty members as mentors instead of senior students. Most of the students wanted the relationship to be mutual on both the sides, with both mentors and mentees having a say in the allocation process. There was no preference to gender for most of the students. *Conclusions*: The mentorship programme found good acceptance with medical students.

Key Words: Mentor; Mentee; Empathy; Medical School; Mentorship

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Introduction

Mentoring has been termed as critical for advancement of science in internal medicine, paediatrics, primary care, and gynaecology.¹ It is an important component to having a successful career in medicine, enhancing acquisition of clinical and research skills and significantly increasing active participation of students in research while still at medical school.² It positively correlates with better academic orientation, focussed goals and increased research inclination.³ Mentoring contributes to professionalism, enhances performance and helps students to cope with stress of studies and career planning. Mentoring in Medicine is a relatively newer concept in India with scanty data available on availability and types of mentoring. There is deficiency of structured Mentoring Programmes as awareness of benefits still lacking. We introduced this programme at our medical college as a pilot project. The students are allocated mentors from amongst faculty members soon after their admission in the medical college. This is done by sequential randomisation using sealed opaque envelopes. In the introductory session, students are explained the concept of medical mentorship, how they can benefit from the programme and introduced to their mentors. They are encouraged to interact with their mentors on a regular basis. In case of any pressing issues, both the mentees and mentors have easy access to Mentorship Cell.

- 1. Ayesha Ahmad, Assistant Professor, Dept. of Obs. & Gynae docayeshaahmad@gmail.com
- 2. Arifa Anwar Elahi, Assistant Professor, Dept. of Obs. & Gynae, drarifaanwar@gmail.com
- 3. Aruna Nigam, Associate Professor and Head of Unit, Dept. of Obs. & Gynae, prakasharuna@hotmail.com
- 4. Rohan Kapoor, MBBS 8th semester student, <u>rohankapoor294@yahoo.com</u> Hamdard Institute of Medical Sciences and Research, New Delhi, India

<u>Correspondence to:</u> Ayesha Ahmad, Assistant Professor, Dept. of Obs. & Gynae, A 259, Nayyer Manzil, Jamia Nagar, New Delhi-110025, M. 8800807090, <u>docayeshaahmad@gmail.com</u>

Aim of the Study

This study was planned to evaluate the response to mentoring amongst medical students after introduction of a structured mentorship programme. We aimed to analyse the advantages and drawbacks of the programme and to take suggestions for improvement.

Materials and Methods

This was a cross sectional study conducted at Hamdard Institute of Medical Sciences and Research, New Delhi. The study was approved by the institutional ethical committee. A pre validated confidential questionnaire, designed as both open and closed ended questions was utilised to obtain responses from a sample size of 300 students, both males and females. Our questionnaire solicited the following information: clarity of the concept to the mentee, duration of being involved in the programme, preferred mentoring model, comments on intended benefits and those obtained. We further sought to assess the mentor mentee relationship regarding frequency of meetings, forms of communication

used and preferred place of interaction.

Inclusion criteria: All medical students in 1st, 2nd and 3rd year at HIMSR who agreed to participate in the study

Exclusion criteria: Any medical student who did not consent to participate in the study

Results

A total of 231 students returned their questionnaire, making the response rate of 77%. All the students were aware of the concept of Medical Mentorship and the model of one to one mentorship was being practiced at the medical college.

Table 1 shows the different aspects of Mentorship being followed in the College. The third year students were meeting their mentors most often, followed by 1st year and lastly 2nd year students. Different forms of communication were being used, of which personal meeting was most frequent. Both males and females were contacting their mentors in person. Phone and social media were also being utilized. Contact by email was less common.

Table1: Details of Mentorship Programme at HIMSR

	•				
	1st year	2 nd year	3 rd year	Males	Females
Frequency of meeting	gs				
Weekly	8 [11.1%]	6 [8.1%]	2 [2.3%]	5 [5%]	11 [8.3%]
Monthly	4 [5.5%]	16 [21.6%]	8 [9.4%]	12 [12%]	16 [12.2%]
Quarterly	7 [9.7%]	10 [13.5%]	10 [11.7%]	18 [18%]	9 [6.8%]
Bi-annually	53 [73.6%]	42 [56.7%]	65 [76.4%]	65 [65%]	95 [72.5%]
	72	74	85	100	131
Forms of communica	tion used				
Personal meeting	25[34.7%]	49 [66.2%]	50 [58.8%]	59 [59%]	65[49.6%]
Phone	15 [20.8%]	6 [8.1%]	15 [17.6%]	11[11%]	25 [19.1%]
Email	10 [13.8%]	1 [1.3%]	5 [5.8%]	8 [8%]	8 [6.1%]
Social media	22 [30.5%]	18 [24.3%]	15 [17.6%]	22 [22%]	33 [25.1%]
	72	74	85	100	131
Do you think Mentors	ship programme has	benefitted you? [%	6]		
Yes	60 [83.3%]	50 [67.5%]	69 [81.1%]	77 [77%]	102 [77.8%]
No	6 [8.3%]	15 [20.2%]	0 [0]	11[11%]	10 [7.6%]
Don't know	6 [8.3%]	9 [12.1%]	16 [18.8%]	12 [12%]	19 [14.4%]
	72	74	85	100	131

Table 2 shows the preferences of students for different aspects of mentorship programme. Majority of students preferred the mentorship model to be 1:1 and faculty members as mentors instead of senior students. Most of the students wanted the relationship to be mutual on both the sides, with both mentors and

mentees having a say in the allocation process. There was no preference to gender for most of the students.

Majority of the students realized that having mentors can benefit them academically. Most of the students felt that many other problems such as adjustment problems can also be discussed with their mentors.

Table 2: Student preferences for Mentorship Programme

•	1 of T.T.	and TT	254.77	3.6.1	D 1		
01 W/L + A 11 7	1st Year	2 nd Year	3 rd Year	Males	Females		
Q1. What According T	You Should Be				85		
1:1		53	50	59			
	[56.9%]	[71.6%]	[58.8%]	[59%]	[64.9%]		
1: Many	13	08	18	18	21		
	[18.0%]	[10.8%]	[21.2%]	[18%]	[16%]		
Many:1	10	10	17	19	18		
	[13.8%]	[13.5%]	[20%]	[19%]	[13.7%]		
Many: Many	08	03	00	04	07		
	[11.1%]	[4.0%]		[4%]	[5.3%]		
	72	74	85	100	131		
Q2. Who According To You Should Serve As A Mentor?							
Senior student	8	10	12	21	9		
Semoi student	[11.1%]	[13.5%]	[14.1%]	[21%]	[6.9%]		
Faculty	64	64	73	79	122		
Faculty	[88.9%]	[86.5%]	[85.9%]	[79%]	[93.1%]		
	72	74	85	100	131		
Q.3 How would you p	refer mentorship						
Voluntary	62	55	70	85	102		
Voluntary	[86.1%]	[74.3%]	[82.4%]	[85%]	[77.9%]		
Involuntary	10	19	15	15	29		
involuntary	[13.9%]	[25.7%]	[17.6%]	[15%]	[22.1%]		
	72	74	85	100	131		
Q4. What do you thinl	would be the id	leal number of Me	eetings?				
Weekly	25	25	23	25	48		
Weekiy	[34.7%]	[33.8%]	[27.1%]	[25%]	[36.6%]		
Monthle	35	35	38	46	62		
Monthly	[48.6%]	[47.3%]	[44.7%]	[46%]	[47.3%]		
0	10	10	20	24	16		
Quarterly	[13.9%]	[13.5%]	[23.5%]	[24%]	[12.2%]		
D: 11	2	4	4	5	5		
Biannually	[2.8%]	[5.4%]	[4.7%]	[5%]	[3.8%]		
	72	74	85	100	131		
Q5.Best Place For The	ese Meetings	'	-	-	-		
Teacher's	30	23	22	22	53		
Room	[41.7%]	[31.1%]	[25.9%]	[22%]	[40.5%]		
Common place like	25	16	30	19	52		
lecture theatre	[34.7%]	[21.6%]	[35.3%]	[22%]	[39.7%]		
	17	35	33	59	26		
Outside campus	[23.6%]	[47.3%]	[38.8%]	[59%]	[19.8%]		
	72	74	85	100	131		
Q6. What Form Of Co							
Personal	50	50	55	55	100		
	[69.4%]	[67.6%]	[64.7%]	[55%]	[76.3%]		
Phone call	10	2	7	15	4		
	[13.9%]	[2.7%]	[8.2%]	[15%]	[3.1%]		
Email	5	5	8	4	14		
	[6.9%]	[6.7%]	[9.4%]	[4%]	[10.7%]		
	[0.770]	[0.7/0]	[2.7/0]	ן [ד/ט]	[10.770]		

31

Social media	7	17	15	26	13
	[9.7%]	[23%]	[17.6%]	[26%]	[9.9%]
	72	74	85	100	131
Q8. Mentors Shoul	d Be Given A Char	ice To Choose The	eir Mentees?		
Yes	39	47	50	45 [450/]	91
	[54.2%]	[63.5%]	[58.8%]	45 [45%]	[69.5%]
No	33	27	35	55 [55%]	40
	[45.8%]	[36.5%]	[41.2%]		[30.5%]
	72	74	85	100	131
Q9. Mentees Shoul	ld Be Given A Char	nce To Choose The	eir Mentors?		·
Yes	52	57	70	75 [750/]	104
	[72.2%]	[77%]	[82.4%]	75 [75%]	[79.4%]
No	20	17	15	25 [25%]	27
	[27.8%]	[23%]	[17.6%]		[20.6%]
	72	74	85	100	131
Q10. Do You Thinl	k Gender of Mentee	e be considered in	allocation of Ment	or?	
Yes	8	4	15	5	22
	[11.1%]	[5.4%]	[17.6%]	[5%]	[16.8%]
No	64	70	70	95	109
	88.9%]	[94.6%]	[82.4%]	[95%]	[83.2%]
	72	74	85	100	131

Discussion

The importance of medical mentorship has been increasingly recognised in the past few decades and many countries have introduced it as an integral part of medical curriculum. Various benefits of mentoring have been identified, some common ones being exchange of ideas between students and faculty, integration of students into faculty network, improving the academic performance of students, improving the quality of research and most importantly promotion of key competencies of communication skills and developing empathy levels, thus helping mentees achieve a greater satisfaction in career and personal life.4 Acknowledging the rise in incidence of psychological abnormalities, suicides and apathy amongst doctors,5 the Medical Council of India [MCI] has proposed teaching of ethics, attitudes and professionalism to students from first year in medical school and their integration into all phases of learning⁶. MCI has also made establishment of Mentoring Cell mandatory in all medical colleges⁷

We could not assess the general awareness of mentoring in medicine as the participants were already enrolled in the programme. The response rate to our questionnaire was 77%. This rate is found acceptable by most of the researchers. ⁸

Different types of mentoring are described in

literature: one-to-one, group, peer-to-peer, on-line mentoring etc. The present study found a higher acceptability for one-to-one mentoring. We calculated an average number of 1-2 meetings between mentors and mentees. It included the introductory meeting which was compulsory for all the participants. This is way behind the average number of seven meetings as observed by other studies. On analysing the reasons, we found that there was hesitation on part of mentees in talking to faculty members. Similar observations have been noted in other studies which have noted that in a mentoring relationship, the mentors often consider that the onus of meeting lies with the mentees. 10 It is also generally agreed that although the initiation of mentoring process should be done by the faculty members, the students need to be pro-active to maintain the success of this relationship. 11,12,13

Most of the participants [89% students] felt the lack of common free time to interact. This has been observed by others also van Eps et al, ^{14,15} who have also commented that mentorship is a commitment, and mentors being the more reliable participant in this relationship, should perceive it as an essential part of training medical undergraduates and shoulder the responsibility with enthusiasm. ¹⁶

The increase in level of understanding between mentors and mentees has been observed in many studies where mentors felt that this was an interesting way to involve the student in the intricacies of medical education.^{17,18,19} However there were concerns regarding blurring of the barriers between teacher and student.

Most of the mentees appreciated the initiative of mentorship. One student commented, 'My aunt had ectopic pregnancy, none of the people in my family were willing to get her admitted due to festival. I was in a dilemma, and then I called up my mentor for advice. It was such a relief to have an unbiased and good opinion.' Another student wrote, 'My mentor was explaining a maternal death to the family. It was such a touching experience for me, to see how effectively she counseled the husband and took pains to expedite the process of discharge. I hope that one day, I will also be able to behave like that.'

With an increasing importance being given to teach medical humanities as part of medical curriculum,

students are being taught communication, humanism and ethics in didactic courses. Mentoring can play a major role in exposing the undergraduates to feelings of empathy by serving as a personal model. One of the shortcomings of this paper is that we have not taken into account the perception of the mentors to this programme. This needs to be investigated to get a wholesome picture of the Structured Mentorship Programme.

Conclusion

- ➤ The mentorship programme found good acceptance with medical students.
- The students desire to have a role in allocation of mentors.
- ➤ The preferred mentorship model is of one-to-one mentorship.

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References

- 1. Frohlich ED. A renewed call to mentor. *Hypertension* 2000 Sep;**36**(3):309-11. PMID: 10988256 https://doi.org/10.1161/01.HYP.36.3.309
- Sambunjak D, Straus SE, Marusic A. A systematic review of qualitative research on the meaning and characteristics of mentoring in academic medicine. *J Gen Intern Med* 2010 Jan;25(1):72-8 doi: 10.1007/s11606-009-1165-8 https://doi.org/10.1007/s11606-009-1165-8
- 3. Reynolds HY. In choosing a research health career, mentoring is essential. *Lung Jan-Feb* 2008;**186**(1):1–6. PMID: 17990035 https://doi.org/10.1007/s00408-007-9050-x
- Paice E, Heard S, Moss F. How important are role models in making good doctors? *Br. Med. J.* 2002;325: 707-710. doi:10.1136/bmj.325.7366.707 https://doi.org/10.1136/bmj.325.7366.707
- Ko, S.M., Kua E.H., Fones C.S.L., Stress and the undergraduates. *Singapore Med. J* 1999; 40(10): 627-630. PMID:10741189
- Vision 2015. Medical Council of India http://www. mciindia.org/tools/announcement/MCI_booklet.pdf [accessed on 14.02.2016]
- Medical Council of India (Prevention and Prohibition of Ragging in Medical Colleges/ Institutions) Regulations. 2009. No. MCI-34(1)/2009-Med./25453 http://www.mciindia.org/RulesandRegulations/ PreventionofRaggingRegulation2009.aspx [accessed on 14.02.2016]
- Fincham JE. Response rates and responsiveness for surveys, standards and the Journal. *Am J Pharm Educ* 2008 15; 72(2): 43.PMCID: PMC2384218 https://doi.org/10.5688/aj720243
- 9. Woessner R, Honold M, Stehr SN, Steudel WI. Support and faculty mentoring programmes for medical students in Germany, Switzerland and Austria. *Med Educ* 2000;34:480–482. https://doi.org/10.1046/j.1365-2923.2000.00406.x
- Bhatia A, Singh N, Dhaliwal U. Mentoring for first year medical students: humanising medical education. Indian Journal of Medical Ethics April 2013;10(2):100-3

- 11. Frei E, Stamm M, Buddeberg-Fischer B. Mentoring programs for medical students a review of the PubMed literature 2000-2008. *BMC Med Educ* 2010; **30**;10:32. doi: 10.1186/1472-6920-10-32 . PMCID: 2881011 https://doi.org/10.1186/1472-6920-10-32
- Coates WC, Crooks K, Slavin S, Guiton G, Wilkerson L. Medical school curricular reform: fourth-year colleges improve access to career mentoring and overall satisfaction. *Acad Med.* 2008;83(8):754-60. doi: 10.1097/ACM.0b013e31817eb7dc. PMID: 18667890 https://doi.org/10.1097/ACM.0b013e31817eb7dc
- Hill JA, Boone S. Personal perception on mentoring. Clin Orthop Relat Res 2002;396:73-5. PMID: 11859225 https://doi.org/10.1097/00003086-200203000-00011
- 14. van Eps MA, Cooke M, Creedy DK, Walker R. Student evaluations of a year-long mentorship program: a quality improvement initiative. *Nurse Educ Today* 2006;**26**(6):519-24. PMID:16540212 https://doi.org/10.1016/j.nedt.2006.01.009
- 15. Pololi LH, Dennis K, Winn GM, Mitchell J. A needs assessment of medical school faculty: caring for the caretakers. *J Contin Educ Health Prof* 2003 ;23(1):21-9.PMID: 12739256 https://doi.org/10.1002/chp.1340230105
- 16. Garmel GM. Mentoring medical students in academic emergency medicine. *Acad Emerg Med* 2004 ;11(12):1351-7.PMID: 15576528 https://doi.org/10.1111/j.1553-2712.2004.tb01927.x
- 17. Fones CS, Kua EH, Goh LG. 'What makes a good doctor?'- views of the medical profession and the public in setting priorities for medical education. *Singapore Med J* 1998; **39**(12):537-42. PMID:10067397
- 18. Markides M. The importance of good communication between patient and health professionals. *J Pediatr Hematol Oncol* 2011 ;**33** Suppl 2:S123-5. doi: 10.1097/MPH.0b013e318230e1e5. PMID: 21952568 https://doi.org/10.1097/MPH.0b013e318230e1e5
- 19. Miller C. Improving and enhancing performance in the affective domain of nursing students: insights from the literature for clinical educators. *Contemp Nurse* 2010; **35**(1):2-17. doi: 10.5172/conu.2010.35.1.002. https://doi.org/10.5172/conu.2010.35.1.002