Table 5. Considering basic principles of ethics, respondents' views on the given situations						
S.No	**Statements (In a situation like this…..)**	**Agree**				**P value**
		Physicians (n=51)		Non-physicians (n=58)		
		No.	%	No.	%	
1.	I usually consider patients' wishes and views before taking any major decision for their care.	44	85	53	91	0.002*
2.	I will "dispose of" patients quickly, whenever I am in a bad mood for personal reasons.	34	67	39	68	0.021*
3.	I always maintain a distance with leprosy, TB or AIDS patients as I am afraid of getting infected.	38	75	41	71	0.517
4.	I always explain to patients the risk (physical/mental/ social) involved in any investigational or treatment procedures.	38	74	53	91	0.132
5.	I refuse to treat or deal with a violent patient.	28	55	49	85	0.001*
6.	I do not take consent from patients or their relatives for any minor or major procedures or in collecting sensitive/ personal data.	45	88	47	81	0.158
7.	I do the best for patients, irrespective of their opinion.	41	81	43	74	0.033*
8.	If a patient wishes to die, I assure or help him/her in doing so.	28	54	44	76	0.000*
9.	Whenever I deal with AIDS or STD patients I maintain confidentiality.	44	86	56	97	0.182
10.	Whenever there is a need to consult my seniors for patient care I always take their views.	44	86	54	93	0.674

P<0.05*=significant

Table 6. Physicians personnel's responses for situations requiring basic ethical principles			
S.No	**Statements** (In a situation like this…..)	**Response (n=51)**	
		Yes	No
1.	I believe that close relatives should always be told about the patient's condition and inform my patients' relatives accordingly.	39	12
2.	If a patient refuses treatment due to his/her religious beliefs, I instruct him/her to find another doctor	23	28
3.	If the law allows abortion, I or any other doctor should not refuse to conduct one.	43	8
4.	I never treat children without the consent of their parents.	39	12
5.	I always obtain permission from patients before doing any physical or internal examination.	46	05
6.	I do not have enough time to listen to the stories of my patients.	25	26
7.	Even if I am unable to treat a patient, I will somehow manage and try to do my best for the patient, but I will not refer him/her to a suitable physician.	7	44

Note: Percentages rounded off

Mentoring for first year medical students: humanising medical education

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Abstract

New entrants are vulnerable to the challenges of the medical course; mentoring programmes are known to offer support. This paper evaluated the experiences of students and faculty enrolled in a new mentoring programme. After needs analysis of students and faculty, a small-group mentoring programme for new medical students was initiated. Fifty-five volunteer faculty mentors were allocated two-three students each. At year-end, feedback using an open-ended questionnaire, revealed that there was no contact in one-third of the cases; the commonest reasons cited were lack of mentee initiative, time and commitment. Supportive mentors were appreciated. Over 95% of respondents believed that mentoring was a good idea; many believed the mentee benefitted; mentors also reported improved communication and affective skills; 60 (77.0%) mentees wanted to mentor new students the following year. Thus, mentoring of first-year students by faculty was effective, when contact occurred, in making the mentee feel supported. Mentoring may be a means of honing the affective domain and humanitarian instincts of medical faculty and students.

Introduction

Proponents of including medical humanities in medical education argue that training in the humanities makes students more humane (1,2). Affective skills such as empathy, caring, altruism, and compassion are desirable in medical students and doctors. All too often, they are underdeveloped because of the stress and vagaries of our higher educational system (2-7). An exhaustive curriculum with minimal time for relaxation, high parental expectations, fear of ragging, humiliating teachers, loneliness, and a host of other factors make the first year difficult for most students (6-10). A supportive infrastructure might help students deal better with stress; mentoring programmes have been advocated to this end (3-5). Mentoring involves a long-term relationship where a senior person (mentor) guides and supports a junior person (mentee; in this case, a medical student) throughout the period of education and training. The goal is to encourage the mentee to reach her/his full potential by sharing knowledge and experience, and providing emotional support and encouragement (3,4).

Mentoring has been found to increase the academic success of students (11,12); the relationship benefits mentors as well, through greater productivity, career satisfaction, and personal gratification (13-15). Although informal, spontaneous mentoring was probably taking place (16), our institution did not have a formal mentoring programme prior to 2009. After conducting a needs analysis amongst students and faculty we designed a small-group mentoring programme for new medical students joining the institution in 2009. The goal of the programme was to provide new entrants with an immediate support network. The aim of this paper is to evaluate the experiences of students and faculty at the end of the first year of the programme, with particular reference to the quality of interactions.

Methods

In February 2009, in anticipation of the batch of new medical students that would be admitted in August 2009, a needs assessment was conducted among faculty and students. After institutional ethics committee approval, all faculty members who attended a faculty meeting were requested to complete a questionnaire on the need felt for a student mentoring programme at the institution. Likewise, students from all semesters were requested to fill in their perceptions on the need for such a programme. Twenty-four of 30 (80%) faculty members who responded, and 258 of 264 (97.7%) students, felt that formal student mentoring should be initiated in the institution.

Consequent to the felt need, faculty volunteers were solicited through posters, through the Medical Education Unit website, and through a formal letter to all departments. Once the list of first semester students admitted in 2009 was available to the academic section of the institution, formal allotment of volunteer faculty mentors was made for all 150 students. On the day they joined, students were handed a letter of welcome that informed them of the mentoring programme, its expected advantages, and the name and contact details of their faculty mentor. Students' contact details were passed on to the respective faculty mentor by e-mail. The faculty and students were advised to visit the website of the Medical Education Unit, where details of the expected roles of mentors and mentees were posted. Additionally, both were advised to communicate difficulties, if any, to the authors.

Finally, in July 2010, before the next batch joined, mentors and mentees were requested to complete an open-ended questionnaire on their experience with the mentoring programme. The questionnaire was derived from several available in the literature (17, 18).

Results

A small-group mentoring model was designed. Fifty-five faculty members volunteered; mentees were randomly allocated so that each mentor had between two to three mentees. At the end of 11 months, in July 2010, qualitative feedback was collected from mentees and mentors (Tables I and II respectively).

Discussion

Mentoring: barriers

It was a novel experience for us to initiate a mentoring programme. Feedback at the end of one year revealed that no contact was made in about one-third of instances; thus, no mentoring resulted. Informal communication revealed that mentors presumed that the onus was on the mentee ("mentee would call if in need"). Mentees, on the other hand, were hesitant about talking to faculty members, some of whom were senior professors. Studies have shown that the initiative to establish the mentoring process should be taken by the faculty member, but the responsibility to keep it going rests with the mentees (19), who must be proactive so that they get the most out of the relationship (4,20).

Being unable to find common free time to meet was reported and has been described by others (13, 21); nevertheless, some students and mentors met up to 10-12 times in the academic year. When specifically questioned, these mentors said they made themselves available and approachable. According to student reports, such mentors are appreciated. These, in fact, are the attributes of a good mentor (16, 22). Existing studies suggest that, once committed to the programme, mentors must enthusiastically approach the opportunity to mentor future doctors, seeing it as an essential component of their roles as academic faculty (3).

Mentoring: benefits

Despite the problems they reported, most mentors and mentees continued to believe that mentoring was a good idea with benefits not limited only to the academic, but also to personal and emotional aspects. Perhaps without realising it at the time, participants in the mentoring relationship demonstrated many of the characteristics of a humane doctor, viz. one who listens, shares time, is helpful, shows empathy, counsels and communicates (23,24). "My grandmother had a skin problem; luckily my friend's mentor is a dermatologist. She

was very helpful" (altruism); "It was nice to know someone in college; even though we never met, I felt secure knowing there was someone there" (emotional support, caring); "My mentor told me it was alright to be anxious; he told me to see him for five minutes every day, and that I would feel better soon. I did."(counseling). The affective domain in student learning is often neglected in favour of the cognitive, since it is difficult to design interventions that target and assess it (25). Based on our results, it might be possible to exploit mentoring as a way of achieving learning objectives in the affective domain. Students who have experienced empathy and caring first hand from their mentors may develop into caring human beings and empathetic doctors; in this regard, mentors have an important responsibility as role models.

Even mentors reported benefits, development of communication and affective skills being prime achievements. Some became aware of student problems and were able to empathise better. "Suddenly I realised that the student is not simply a case-record form, or a viva-voce, but a living creature with fears and aspirations" (discovery); "It was lovely to re-discover how multifaceted, how *talented* students really are"; "Interacting with my mentee showed me the students' perspective; I don't humiliate students anymore" (compassion). Becoming conversant with student issues is a good way to mentor students (16). We are encouraged by these responses; mentoring, for the benefits that it has shown in this fledgling effort, may strengthen the humanitarian instinct and enhance the development of the affective domain in both faculty and students. With mounting global interest in including medical humanities in the medical curriculum, mentoring may be a small step in that direction (26).

It was unfortunate that many individuals did not enter into a mentoring relationship. In our experience, in several instances, mentoring broke down the traditional barriers between teachers and students: "My mentor was friendly; she made it easy for me to talk to her"; "It felt good to be able to discuss my problems with a teacher." Over the years, we hope mentoring becomes entrenched in the culture of the institution. New entrants to the medical course are creative and enthusiastic; however, as they advance academically, rote learning and other inherent difficulties result in intellectual stifling and burnout (27). Thus, idealism about their role as medical care-providers, and altruism and social-mindedness, are soon replaced with cynicism and self-interest (28). Existing studies suggest that by providing opportunities through the medical humanities, the creative instincts of medical students can be used to foster humanitarianism (29). Good mentors, through role modelling, can play a pivotal role in the evolution of a naïve medical student into a humane practitioner of the healing arts (24), perhaps even preventing burnout. In return, mentors could enhance their own lives, deriving important professional and teaching skills (13-15).

There is evidence, in the literature and from our results, to suggest that mentoring of medical students is a vitally important component of the medical curriculum; institutions should actively encourage it (19). Based on the feedback we have received, we will assuredly continue with the programme. The barriers identified will be tackled; suggestions from both mentees and mentors will help.

To summarise, this paper describes our early experience with a formal mentoring programme for students. We advocate that mentoring should be an essential part of medical training. The effort needed is small, as it is not difficult for committed faculty and student mentors to find time for their mentees. Importantly, there are benefits for both mentors and mentees; also bonding and trust between teachers and students grow. Students with effective mentors as role models will imbibe their attributes and, in turn, be good mentors, and thus perpetuate the cycle. Depending on needs and cultural sensitivities, each institution should be encouraged to evolve its own mentoring programme. What should matter is the outcome, not the process. Future work could focus on fostering and maintaining humanitarian attitudes in medical students and faculty using mentoring and the medical humanities.

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References

1. Ousager J, Johanessen H. Humanities in undergraduate medical education: a literature review. *Acad Med.* 2010;85(6): 988-98.
2. Pedersen R. Empathy development in medical education--a critical review. *Med Teach*. 2010;32(7):593-600.
3. Garmel GM. Mentoring medical students in academic emergency medicine. *Acad Emerg Med* 2004 Dec;11(12):1351-7.
4. Frei E, Stamm M, Buddeberg-Fischer B. Mentoring programs for medical students - a review of the PubMed literature 2000-2008. *BMC Med Educ.* 2010 Apr 30;10:32.
5. von der Borch P, Dimitriadis K, Störmann S, Meinel FG, Moder S, Reincke M, Tekian A, Fischer MR. A novel large-scale mentoring program for medical students based on a quantitative and qualitative needs analysis. *GMS Z Med Ausbild* 2011;28(2):Doc26. Epub 2011 May 16.
6. Castaldelli-Maia JM, Martins SS, Bhugra D, Machado MP, Andrade AG, Alexandrino-Silva C, Baldassin S, de Toledo Ferraz Alves TC. Does ragging play a role in medical student depression - cause or effect? *J Affect Disord.* 2012 Aug;139(3):291-7. doi: 10.1016/j.jad.2012.02.003. Epub 2012 Mar 2.
7. Abdulghani HM, AlKanhal AA, Mahmoud ES, Ponnamperuma GG, Alfaris EA. Stress and its effects on medical students: a cross-sectional study at a college of medicine in Saudi Arabia. *J Health Popul Nutr*. 2011 Oct;29(5):516-22.
8. Al-Dubai SA, Al-Naggar RA, Alshagga MA, Rampal KG. Stress and coping strategies of students in a medical faculty in Malaysia. *Malays J Med Sci*. 2011Jul;18(3):57-64.
9. Behere SP, Yadav R, Behere PB. A comparative study of stress among students of medicine, engineering, and nursing. *Indian J Psychol Med*. 2011Jul;33(2):145–148.
10. Shah M, Hasan S, Malik S, Sreeramareddy CT. Perceived stress, sources and severity of stress among medical undergraduates in a Pakistani medical school. *BMC Med Educ*. 2010 Jan 15;10:2.
11. Meinel FG, Dimitriadis K, von der Borch P, Stormann S, Niedermaier S, Fischer MR. More mentoring needed? A cross-sectional study of mentoring programs for medical students in Germany. *BMC Med Educ* 2011 Sep 24;11(1):68. doi: 10.1186/1472-6920-11-68.
12. Nakanjako D, Byakika-Kibwika P, Kintu K, Aizire J, Nakwagala F, Luzige S, Namisi C, Mayanja-Kizza H, Kamya MR. Mentorship needs at academic institutions in resource-limited settings: a survey at Makerere University college of Health Sciences. *BMC Med Educ* 2011Jul 29;11:53.

13. 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 Aug;26(6):519-24. Epub 2006 Mar 15.
14. Cohen MS, Jacobs JP, Quintessenza JA, Chai PJ, Lindberg HL, Dickey J, Ungerleider RM. Mentorship, learning curves, and balance. *Cardiol Young.* 2007 Sep;17 Suppl 2:164-74.
15. Flexman AM, Gelb AW. Mentorship in anesthesia. *Curr Opin Anaesthesiol.* 2011 Dec;24(6):676-81. doi: 10.1097/ACO.0b013e32834c1659. Review.
16. Rose GL, Rukstalis MR, Schuckit MA. Informal mentoring between faculty and medical students. *Acad Med.* 2005 Apr;80(4):344-8.
17. Planning Commission of British Columbia. Mentorship program evaluation form. 2010 Jul[cited 2013 Mar 28].Available from: http://www.pibc.bc.ca/sites/default/files/pdfs/PIBC-Mentoring-Program-Evaluation-July2010.pdf
18. Virginia Commonwealth University. School of Medicine. Faculty Mentoring Guide [Internet]. 2002 May 3[cited 2013 Mar 28]. Available from: http://www.medschool.vcu.edu/facultyaffairs/career_dev/facultymentoringguide/appendixa.html
19. Coates W, 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 Aug;83(8):754-60.
20. Hill JA, Boone S. Personal perception on mentoring. *Clin Orthop Relat Res.* 2002 Mar;(396):73-5.
21. 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 Winter;23(1):21-9.
22. Cho CS, Ramanan RA, Feldman MD. Defining the ideal qualities of mentorship: a qualitative analysis of the characteristics of outstanding mentors. *Am J Med/* 2011May;124(5):453-8.
23. 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 Dec;39(12):537-42.
24. Markides M. The importance of good communication between patient and health professionals. *J Pediatr Hematol Oncol.* 2011 Oct;33 Suppl 2:S123-5.
25. Miller C. Improving and enhancing performance in the affective domain of nursing students: insights from the literature for clinical educators. *Contemp Nurse.* 2010 Apr-May;35(1):2-17.
26. Papadimos TJ. Voltaire's Candide, medical students, and mentoring. *Philos Ethics Humanit Med.* 2007 Jul 3;2:13.
27. Kirklin D, Meakin R. Editorial: Medical students and arts and humanities research- fostering creativity, inquisitiveness, and lateral thinking. *Med Humanities.*2003;29:103. doi: 10.1136/mh.29.2.103
28. Daaleman TP, Kinghorn WA, Newton WP, Meador KG. Rethinking professionalism in medical education through formation. *Fam Med.* 2011 May;43(5):325-9.
29. Simmenroth-Nayda A, Alt-Epping B, Gágyor I. Breaking bad news – an interdisciplinary curricular teaching-concept. *GMS Zeitschrift für Medizinische Ausbildung* 2011;28(4):1-12. German.

Table I. Feedback on the mentoring programme from questionnaires distributed to 150 mentees

Questionnaire item	Mentee responses N=78 (response rate=52.0%)
How many mentoring sessions have you had?	Range 0-10; Average=2.0±2.35
Was the quality of contact with your mentor adequate?	Yes: 38 (48.7%)
If not why not? **Logistical barriers:** Tried but couldn't meet (n=5); time constraints (n=2) **Attitudinal barriers:** Mentor was indifferent (n=7); I did not commit to the program (n=2)	
Do you think that mentoring is a good idea?	Yes=75 (96.2%)
Have you personally benefitted from the relationship?	Yes=26 (33.3%)
What did you enjoy most about mentoring? No response (n=30); felt supported (n=12); nothing (n=9); mentor's concern (n=8); interaction (n=7); allowed settling in (n=3); all problems addressed to a single person (n=3); had someone to advise about the medical profession (n=3)	
Do you have any concerns about the programme? lack of commitment from both sides (n=7); lack of interaction (n=5); lack of time (n=3)	
Suggest how you would like to see the programme enhanced Allot a time/ensure meetings/regulate (n=27); more commitment, more time, more interaction (n=7); have student mentors (n=7); mentors should make themselves easily available, show concern (n=5); both mentor and mentee should be equally involved (n=4); explain the importance of mentoring as mentees feel hesitant to meet mentors/introduce formally (n=3)	

Table II. Feedback on the mentoring programme from questionnaires distributed to 55 mentors

Questionnaire item	Mentor responses N=29 (response rate=52.7%)
How many mentoring sessions have you had?	Range 0-12; Average=4.0±5.24
Was the quality of contact with your mentee adequate?	Yes=14 (48.3%)
If not, why not? **Logistical barriers**: time constraints (n=5); had no contact details (n=4) **Attitudinal barriers**: Mentee hesitation/lack of interest (n=6); role not clear to both parties (n=1)	
Do you think that mentoring is a good idea?	Yes=28 (96.6%)
Do you believe that the mentee benefitted?	Yes=14 (48.3%)
What did you enjoy most about mentoring? Problem sharing and solving (n=6); nothing (n=5); personal contact with students (n=4); informal teaching learning (n=2); mentee satisfaction (n=2); saw things from student's perspective (n=2); humbling learning experience, students need to be respected (n=1)	
What skills did you develop as a result of the programme? None, as there was no contact (n=15); communication skills/listening (N=8); affective skills (n=6); problem solving (n=2)	
What did you find difficult or frustrating about mentoring? Making contact (n=8); nothing difficult or frustrating (n=7); mentees' lack of interest (n=4); lack of time (n=4); trying to dispel fear from their minds, and earn their respect (n=1)	
Suggestions for improvement No response (n=6); voluntary mentees only (n=8); formal introduction, with parents (n=6); official meetings so mentees can get out of classes (n=4); popularize among mentees (n=3); student mentors (n=3); frequent review/feedback (n=3); mentor to mentor meetings (n=2); circulate mentoring guidelines (n=2)	