



Mentoring Undergraduate Students: Perception of Medical and Dental Faculties on Undergraduate Mentoring Program

Kye Mon Min Swe^{1*} and Amit Bhardwaj²

¹*Faculty of Medicine and Health Sciences, Universiti Tunku Abdul Rahman, Malaysia.*

²*Newcastle University Medicine Malaysia, Malaysia.*

Authors' contributions

This work was carried out in collaboration between both authors. Authors KMMS and AB designed the study. Author KMMS performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Author AB managed the literature searches. Both authors read and approved the final manuscript.

Article Information

DOI: 10.9734/JESBS/2020/v33i230202

Editor(s):

(1) Dr. Alina Georgeta Mag, Lucian Blaga University of Sibiu, Romania.

Reviewers:

(1) Mona Ionaş, Lucian Blaga University of Sibiu, Romania.

(2) Yatin Talwar, India.

Complete Peer review History: <http://www.sdiarticle4.com/review-history/56100>

Received 29 January 2020

Accepted 04 April 2020

Published 07 April 2020

Original Research Article

ABSTRACT

Background: Mentoring is key to a successful career in medicine. Mentoring is the goal of developing nurturing relationships between elder adult who is dependable and someone who is younger needs consistent support or an intervention. Mentoring has shown to be essential for the acquisition of clinical and research skills, as well as career development. A good mentor maintains sight of the overall goal of the relationship and hold the focus for mentees personnel and professional growth overtime.

Objectives: The objectives of study were to explore how faculties of medical and dental programme understand their role as mentors and to identify the perceptions of faculties regarding mentoring medical and dental students.

Methodology: Cross sectional study was conducted at Melaka Manipal Medical College and lecturers from medical and dental faculties were participated in the study. The data were analysed by using SPSS.

Results: There were total 48 faculties (38 medical and 10 dental faculties) participated in this study. Majority (39.58%) of faculties defined mentor as counsellor, (22.91%) career guide, (16.6%) role

*Corresponding author: E-mail: khmoneminswe@gmail.com, kyemon@utar.edu.my;

model while (8.3%) defined as research guide. Regarding perception of faculties on the mentorship program, (81.2%) of faculties perceived that mentors have positive influence on choosing future specialties options of the mentees, (75%) of the faculties were willing to discuss with the mentees regarding personal, financial issues as well as academic performance individually, (77%) perceived that time constraint is the barrier for successful programme and (62.5%) of faculties perceived that there should have a formal training prior to appointment as mentor.

Conclusion: It was concluded that the roles, tasks and communication of mentor and mentees should be standardized. Mentors should have a formal training prior to appoint as mentor.

Keywords: Mentorship; faculty; medical; dental; student; Malaysia.

1. INTRODUCTION

Mentoring is defined as the one-to-one support of a novice or less experienced practitioner (mentee) by a more experienced practitioner (mentor), designed primarily to assist the development of the mentee's expertise and to facilitate their induction into the culture of the profession and into the specific local context [1]. Various studies defined role of mentor variously such as small-group leader, academic advisor, preceptor, supervisor, or role model and there was no clear distinction made between the terms tutoring, coaching, and mentoring. Furthermore, a role model or supervisor may become with time a mentor to a student if there is sufficient exposure and chemistry [2,3]. A study by Usmani et al. defined mentoring as guidance, counselling and supervision which are needed to combat the stressful life among medical students [4].

Mentoring is key to a successful career in medicine. Mentoring has shown to be essential for the acquisition of clinical and research skills, as well as career development [5-7]. According to the Vygotsky sociocultural theory, effective learning happens through interactive processes of discussion, negotiation, and sharing. Social influence through more knowledgeable other is one of the factors that learning occurs through social interaction with a skilful tutor or mentor. Having a mentor positively correlates with productivity in research, the number of publications and grants for junior academic physicians [8]. In this study, mentoring focus on the mentor relationship between faculties (teacher) and medical and dental students. Mentoring was also described within the context of a formal mentoring program with the goal of developing nurturing relationships between someone who is older or an adult who is dependable and stable and someone who is younger or a child who needs consistent support or an intervention [9]. Good mentor relationship

involves self-knowledge and identification of one's style and limitations and it require active maintenance. Importantly, a good mentor maintains sight of the overall goal of the relationship and hold the focus for mentees personnel and professional growth overtime.

Mentor programmes are increasingly common in undergraduate medical and dentistry and many positive effects have been reported. However, various roles and tasks may be included in the mentor role and the definitions of a mentor in the literature are not consistent. This makes it difficult to pinpoint exactly what it means to be a mentor and the effects of mentorship. Different interpretations of being a mentor may lead to role confusion for the mentors, whom may also be supervisors, examiners or teachers and conflicts with mentees regarding expectations may occur [10,11].

Despite there was mentorship program at Melaka Manipal Medical College (MMMMC), there was no formal evaluation done on mentoring system from the mentor's perspective. Mentors' perceptions and mentoring practice patterns remain unclear during the study conducted in year 2013. According to literature, commitment and regular maintenance of mentorship program increased the effectiveness of mentoring and there were few studies were conducted in Malaysia regarding mentorship program in medical college [12]. By conducting this study, it will contribute to the need for research within the field of mentoring and facilitates the understanding of previous findings by clarifying how the mentor role may be understood and what effects this may have. Furthermore, it will help in promoting mentorship program of medical colleges. The objectives of the study were to explore how faculties of medical and dental education understand their role as mentors and to identify the perceptions and the effects on mentors regarding mentoring medical students at Melaka Manipal Medical College.

2. MATERIALS AND METHODS

2.1 Methodology

A cross sectional study was conducted at Melaka Manipal Medical College in year 2013. The inclusion criteria were all the faculties from medical and dental program who were at the time of study holding the position as mentor. Those mentor who were not in the medical or dental programme and had less than one year of mentoring experience were excluded. The questionnaires was used as tool to explore the objectives. A self-administered questionnaire consists of two sessions, sociodemographic background and twelve statements of perceptions on mentorship programme including two negative statements. The questionnaires were developed by researcher and team. To validate the questionnaires, expert opinion from medical education experts was obtained. Then checked for content validity and then obtained expert opinion to review the items for logical validity. After revision of items based on the feedbacks, pilot study was conducted. Reliability coefficient value was calculated (Cronbach alpha > 0.75).

The pretested structured questionnaires were distributed to all the lecturers of medical and dental faculties of Melaka Manipal Medical College. The purpose of the study was explained and informed consent was taken. All the collected data were screened for accuracy. Data were analysed by using SPSS, version 18.0. Descriptive and inferential statistics was generated subsequently. Perception questions were analysed by five point Likert scale system. The study was approved by the Research Ethics Committee of Melaka Manipal Medical College.

3. RESULTS

3.1 Socio-demographic Profile

There were total 62 faculties in medical and dental programme in year 2013 and among them 48 faculty members (38 medicine and 10 dental) participated in the study with response rate of (77%). Age distribution of faculty members were from 30-67 year and teaching experiences range from 1 year to 36 year with mean age of teaching experiences was 11.79 years. There were total 36 (75%) male faculties and 12 (25%) female faculties participated in this study. Majority of

faculties, (68.8%) were Indian followed by Malay, Chinese, Myanmar, Srilanka and British altogether (31.2%). Sociodemographic character of the faculties were shown in Table 1.

3.2 Concept and Practice of Mentorship Programme

Regarding the definition of the role of mentor, (39.58%) of faculties defined mentor as counsellor, (22.91%) career guide, (16.6%) role model while (8.3%) defined as research guide. In this study, (41.7%) of faculties expected to meet their mentees three monthly whereas (37.5%) of them wish to meet monthly and (14.7%) six monthly. Regarding effective methods of communicating with the mentees, (89.6%) responded that personnel meeting is the most effective, (22.9%) responded that email contact is effective method, the others (20.8%) responded the social networking was effective communication. Regarding benefit of mentorship program (58.3%) benefit for self-reflection, (54.1%) benefit for job satisfaction and (12.5%) for academic recognition.

3.3 Perception of Faculties on Mentorship Program

Regarding perception of faculties on mentorship program, twelve statements including two negative statements were used to assess perception of faculties and by using five point Likert scale and the results were shown in Table 2.

There were (97.9%) of faculties perceived that *"Mentors can help mentees to improve academic performance"* and (81.2%) perceived that *"Mentors can have positive influence on choosing future specialties options of the mentees"*, total (77.0%) perceived that *"Lack of time for mentors and mentees is the barrier for successful programme"*, and (75.0%) of faculties perceived that *"Mentees can discuss with the mentor for personal, financial issues and academic performance"*. There were (62.5%) of faculties perceived that *"Mentors should have a formal training prior to appoint as mentor"*.

4. DISCUSSION

4.1 Role and Responsibilities of Mentor

In this study, regarding the definition of the role of mentor, (39.58%) of faculties defined mentor

as counsellor, (22.91%) career guide, (16.6%) role model while (8.3%) defined as research guide. In a study by Lian 2015, the mentors perceived that mentoring is all about counselling, which is the most preferable way of problem solving [13].

According to literature, role of mentor involves many of the skills teaching involved as deeper level. Various studies defined roles of mentor described variously such as small-group leader, academic advisor, preceptor, supervisor, or role model and there is no clear distinction made between the terms tutoring, coaching and mentoring [2].

Good mentors communicate clearly, effectively and they recognize different learning styles and adjust their instructional approach to best reach a student. While some students need directive, concrete, task-oriented assistance, others may need help articulating their ideas or clarifying a life purpose [14]. Mentors

demonstrate techniques and give constructive feedback to the students performances, written work, mentor also review the students' progress and challenge mentees to take steps forward towards their long term goal [15]. In this study, (97.9%) of faculties agreed that mentors can help mentees to improve academic performance. Beyond teaching, mentors invest in their personal and professional development, recognize potential and take opportunities to promote their mentees' careers. As role models, mentors often impart wisdom indirectly through their behaviours, attitudes, and perspectives [16].

4.2 Influence of Mentor on Mentee

In this study, (81.2%) of faculties perceived positively that mentors have positive influence on choosing future specialities options of the mentees. Good mentors have the ability to engage with a student on a personal and emotional level. They are able to tolerate expressions of emotion in their mentees who

Table 1. Sociodemographic character of the faculties (n=48)

Socio demographic characters of participants		Frequency	Percent
Age Group	25-40 years	20	41.7
	46-55 years	9	18.7
	56-70 years	19	39.6
Gender	Male	36	75.0
	Female	12	25.0
Ethnicity	Indian	33	68.8
	Malay	2	4.2
	Others	13	27.0
Total		48	100

Table 2. Perception of faculties on mentorship program

Statements	SDA/DA	U	SD/A
Mentors should have freedom to choose their own mentees	68.8	16.6	14.6
Mentors should meet their mentees every month	27.1	16.6	56.3
Mentors and mentees should meet informally	18.7	10.4	70.9
Mentees can discuss with the mentor for personal, financial issues and academic performance	10.4	12.5	75.0
Mentors can help mentees to improve academic performance	0	2.1	97.9
Neither mentors nor mentees are interested in mentorship program	52.1	35.4	12.5
Meeting with the mentee is wasting of time	87.4	8.3	4.3
Mentors cannot solve personal issues of the mentees	50.0	25.0	25.0
Mentors cannot solve financial issues of the mentees	25.0	31.2	33.8
Mentors can have positive influence on choosing future specialities options of the mentees	2.1	16.6	81.2
Lack of time for mentors and mentees is the barrier for successful programme	10.4	12.6	77.0
Mentors should have a formal training prior to appoint as mentor	16.6	20.8	62.4

Strongly disagree (SDA), Dis agree (DA), Uncertain (U), Agree (A), Strongly agree (SA)

may seek advice or reassurance when they are feeling frustration, discouragement, or anxiety. A study by Jayalakshmi et al. stated that friendly relationship with their mentees was the crucial in order to create relaxing environment for effective communication and better understanding [17]. Effective mentors are open to discussing extra educational topics and are willing to share their own personal experiences and struggles when they are relevant to the current situation [14].

4.3 Matching Mentor and Mentees

Total (68.8%) of faculties had negative perception on the statement "Mentor should have freedom to choose their own mentees". In literature, some universities applied mentoring match checklist to ensure your conversations have covered appropriate ground and resulted in a shared commitment. Mentors responsibilities during selection were first of all to have a clear understanding of your motivation to be a mentor, to have leadership experience and availability and to be trained to be a more effective mentor. There were programs which allowed mentees to choose their mentors, while the others program assigned mentors to mentees, some program allowed mentees choose their mentors where mentor profiles can be available online and also personal interviews with mentors and mentees [18].

4.4 Frequency of Meeting

Studied have recommended various time frame for meet mentor-mentee meeting such as mentor and mentees should meet 3 monthly (Pfund et al., 2016) and 6 monthly (Lian et al. 2015). In this study, (41.7%) of faculties expected to meet their mentees three monthly whereas (37.5%) of them wish to meet monthly and (14.7%) six monthly. Regarding perception (56.3%) of faculties agreed or strongly agreed to the statement "*Mentors should meet their mentees every month*" and (70.9%) agreed or strongly agreed to the statement "Mentor should meet their mentees informally". For negative statements "*Neither mentors nor mentees are interested in mentorship program*" (52.1%) perceived negatively and (35.4%) perceived uncertain. This results evidenced that the faculties aware of the importance of mentoring and but regarding interest seems questionable. This area should explore more further about why some of the mentors were not interested in mentoring

program. Regarding the negative statement, "*Meeting with the mentee is wasting of time*", majority of respondents (87.4%) had disagree or strongly disagree on the statements. Regarding the statement "*Lack of time for both mentor and mentee is the barrier for successful programme*", (77%) of faculties agreed on that statement. This statement was supported by the study by Lian, 2015 that the frequency of meeting depends on the time factor and the respondents, both mentors and mentees are busy on their works and studies respectively. Thus, they usually meet at least once in six months or after the academic results are announced [13].

4.5 Agenda during Meeting

In this study, (75%) faculties agreed or strongly agreed on the statement "*Mentees can discuss with the mentor for personal, financial issues and academic performance*". Luckhaupt et al. stated that mentor and mentees meeting was being utilized in discussing professional issue [19]. In a study by Lian et al. the respondent perceived that both academic and personal matters are main aspects involved in mentoring process [13]. There should be flexibility of agenda as mentees have a variety of goals, which may be broad, specific, medically related, work-habit related or personal. Periodic discussion of the mentee's goals, ambitions and interests, issue and problem will enable the mentor to gauge his or her ability to be helpful either directly or through referral to other resources. It is the duty of mentors to motivate, encourage, share their experiences, discuss, solve the problems and give advices when their mentees confide in them [20].

4.6 Effects of Mentoring Programs

In this study, (81.2%) of faculties perceived positively that mentors can have positive influence on choosing future specialities options of the mentees, agree and strongly agree. This results were supported by the review study by Frei, 2010 that for students pursuing an academic career, a one-to-one mentorship was most effective are important for effective mentoring programs. The mentor must serve as both a professional and personal role model and provision of career counselling by mentors leads to juniors' making an earlier choice in terms of specialty and career [18].

4.7 Benefit of Mentor by Mentorship Program

Regarding benefit of mentorship program (58.3%) benefit for self-reflection, (54.1%) benefit for job satisfaction, and (12.5%) for academic recognition. The benefits of being mentor was mentioned in BLaST Mentoring Handbook such as “You’ll feel satisfied, proud, and other energizing emotions”, “You may get some extra work done” and “You’ll review and validate what you know and what you’ve accomplished”. This statements were similar to the respondent perceived in this study. The other benefits included learning other skills from mentees, received recognition from superiors and helping organization at the same time and future personnel payoff when mentees became successful in their career [20].

4.8 Training for Effective Mentorship

Mentors should have a formal training prior to appointment as mentor. In this study (62.5%) of the faculties agreed that there should have a formal training for new faculties prior to appointment as mentor for skill development in communication and problem solving in various kinds of situation which can promote the relationship between mentor and mentee by having the guidelines regarding to the ways in solving unethical issues and other problem [4,21-23]. Effective mentoring, which encompasses effective working relationships, relevant mentor-mentee communication and includes generic and specialist communication skills; the characteristics of mentors and enabling functions, which include the mentor as a role model for learners, and ascertaining own mentorship potential; the actions that support learning including the use of learning contracts.

5. STUDY LIMITATION

This study carried out at private medical university with limited number of faculties, the findings cannot be generalized to other medical schools or any other faculties in the university. It was recommended to carry out all the medical universities in Malaysia.

6. CONCLUSIONS

It was concluded that the roles, tasks and communication of mentor and mentees should be standardized. Mentors should have a formal training prior to appointment.

CONSENT

As per international standard or university standard, respondents’ written consent has been collected and preserved by the author(s).

ACKNOWLEDGEMENT

The lead author would like to acknowledge Professor Adinegara Bin Lutfi Abas, dean of Melaka Manipal Medical College for his kind support to conduct this study.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Hobson AJ, Ashby P, Malderaz A. mentoring beginning teachers: What we know and what we don’t. Teaching and Teacher Education. 2009; 25:207-216.
2. Gopee N. Mentoring and supervision in health care SAGE Publications Ltd, London. 2015;978:1-4739. [ISBN: 978-1-4739-0246-6]
3. Gray J, Armstrong P. Academic health leadership: Looking to the future. Clin Invest Med. 2003;26:315-326.
4. Usmani A, Omaeer Q, Sultan ST, Mentoring undergraduate medical students: Experience from Bahria University Karachi. Journal of the Pakistan Medical Association. 2011;61: 790-794.
5. Reynolds HY. In choosing a research health career, mentoring is essential. Lung; 2008. DOI: 10.1007/s00408-007-9050-x
6. Sambunjak D, Straus SE, Marusic A. Mentoring in academic medicine: A systematic review. Jama. 2006;296:1103-1115. DOI: 10.1001/jama.296.9.1103
7. Stamm M, Buddeberg-Fischer B. The impact of mentoring during postgraduate training on doctors’ career success. Medical Education. 2011;45:488-96. DOI: 10.1111/j.1365-2923.2010.03857.x
8. Bauchner H: Mentoring clinical researcher. Arch Dis Child. 2002;87:82–84.
9. David L. Du Bois, Michael J. Karcher: Handbook of youth mentoring. SAGE Publication (ed); 2013.

10. Dorsey LE, Baker CM. Mentoring undergraduate nursing students assessing the state of the science. *Nurse Education*. 2004;29:260-265.
DOI: 10.1097/00006223-200411000-00013
11. Stenfors-Hayes T, Hult HK, Dahlgren LO. What does it mean to be a mentor in medical education? *Medical Teacher*. 2011;33:423-428.
DOI: 10.3109/0142159X.2011.586746.
12. Rose GL, Rukstalis MR, Schuckit MA. Informal mentoring between faculty and medical students. *Academic Medicine*. 2005;80(4):344-348.
DOI: 10.1097/00001888-200504000-00007
13. Lian CW, Hazmi H, Hui KL. Perceptions on mentoring concept and mentoring practices among medical mentors: A Mixed-Methods Study. *Education in Medicine*. 2015;7(2):e27-e38.
DOI: 10.5959/eimj.v7i2.343
14. Zachary LJ. *Creating a mentoring culture: The organization's guide*. San Francisco, CA: Jossey-Bass. 2005;e27-e38.
15. Severin Pinilla, Tanja Pander, Konstantinos Dimitriadis: 5 years of experience with a large-scale mentoring program for medical students. *GMS Z Med Ausbild*. 2015;31(1):e27-e38.
16. Hudson P, Hudson S, Gray B. learning about being effective mentors: Professional learning communities and mentoring. *Social and Behavioral Sciences*. 2013;93:1291-1300.
DOI: 10.1016/j.sbspro.2013.10.031
17. Jayalakshmi L, Damodar KS, Nadig P. Mentoring for medical undergraduates: Feedback from mentees (Need for training of mentors). *Asian Journal of Medical Sciences*. 2011;2:151-158.
DOI: 10.3126/ajms.v2i3.4807
18. Frei E, Stamm M., Buddeberg-Fischer B. Mentoring programs for medical students - A review of the PubMed literature. *BMC Medical Education*. 2010;10(32).
19. Luckhaupt SE, Chin MH, Mangione CM. Mentorship in academic general internal medicine: Results of a survey of mentors. *Journal of General Internal Medicine*. 2005;20:1014-1018.
DOI: 10.1007/S11606-015-3295-5
20. BLaST mentoring handbook. A National Institutes of Health funded BUILD program The Office of Scientific Workforce Diversity; 2019.
Available: <https://www.alaska.edu/blast/mentor-resources/Mentoring-Handbook-Version-2.1-8.7.18.pdf>
21. McDonald KS, Hite LM. Ethical issues in mentoring: The role of HRD. *Advances in developing human resources*. 2005;7:569-582.
Available: <https://doi.org/10.1177/1523422305279689>
22. Berk RA, Berg J, Mortimer R. Measuring the effectiveness of faculty mentoring relationships. *Academic Medicine*. 2005; 80:
DOI: 10.1097/00001888-200501000-00017
23. Buddeberg-Fischer B, Herta KD. Formal mentoring programmes for medical students and doctors: A review of the Medline literature. *Med Teach*. 2006;20: 248-257.
DOI: 10.1080/01421590500313043

© 2020 Swe and Bhardwaj; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:

*The peer review history for this paper can be accessed here:
<http://www.sdiarticle4.com/review-history/56100>*