

Faculty Member's Viewpoints about Mentorship in Shiraz University of Medical Sciences, 2012

نظره اعضاء الهيئه العلميه في جامعه شيراز للعلوم الطبيه تجاه منتور شيب في عام ١٣٨٩ هـ.ش.

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Background: Mentorship develops a personal relationship in which a more experienced and knowledgeable person helps a less experienced person. In this study we aimed to investigate mentorship status and its impact from viewpoint of clinical professors of Shiraz medical school.

Methods: In this cross-sectional study 99 clinical professors of medicine at Shiraz medical school were investigated using simple random sampling. A valid and reliable questionnaire was used to collect the data. The clinical teacher were asked to tell their viewpoint about mentorship in ideal and real situation. A 5 point Likert scale was used for scoring of the questionnaire. Statistical analysis was performed using SPSS 16 software, using t-test, paired t-test, and correlation.

Results: Among the various features, from clinical teachers' viewpoint "being provocative" was the most important feature of an ideal clinical Mentor (mean score: 4.67, SD: 0.55). Among the effects of mentorship on personality support of the students, in the ideal case, the effect of "accountability incassation" had the highest mean score (4.91). However teachers believed that in real situation, "stress reduction" of students were the most effective role of mentorship in supporting the students (mean score: 2.76). At career supporting of the students, teachers believed in the ideal state "make motivation towards career" in students had the highest impact (mean score: 4.58). In the real status, "scientific development" and "professional promoting and career success," in student had the highest mean score (2.46).

Conclusions: Mentoring is as an important process for the professional development of learners. In today's situation the most time of mentors are spend of stress reduction of the students. However in ideal situation, positive mentors not only help to shape the professional development of our future physicians by improving the accountability incassation, they also influence their career choices. To train teachers as a Mentor, we can use short-term courses and workshops and prepare some outlined such as learning and teaching process, adult learning principles, role clarity, setting educational goals, assessment and evaluation of learner and provide feedback.

Keywords: Mentorship; Mentor; Personality Support; Career Support

المقدمه: المنتور شيب هو توسيع ارتباط شخص الذي يقوم فيه شخص ذو تجربه بمساعدته و ارشاد شخص ذو تجربه اقل. تمت هذه الدراره برهف تبين وضعيه المنتور شيب و تأثيره من خلال نظره اعضاء الهيئه العلميه في جامعه شيراز للعلوم الطبيه.

الطوب العلم: اشترك في هذه الدراره ٩٩ استاذ في التعليم في كليه الطب في جامعه شيراز للعلوم الطبيه. تم استخدام استمارات مؤيد على موازين اخصائيه (ليكرت خمس اجويه). تم الطب من الاساتذه تبين آراهم بشكل واقعي و ايرتولوجي. تم تحليل المعلومات عبر برنامج spss 16 واختبارات t-test, paired t-test. **النتائج:** من الخصائص المختلفه تم اختيار خاصيه التحفيز من قبل الاساتذه بعنوان اهم خاصيه في منتور ايرتولوجي برهف (بمعدل علامه ٤.٦٧ و انحراف معيار ٠.٥٥). ان (رفع مستوى تحمل المسئوليه) حصلت على اعلى علامه في مجال اثرات ارتباط المنتور شيب في بعد الصيائت الشخصيه و النفسيه على الطلاب (٤.٩١). في الضروف الواقعيه ان تنسي مستوى التوتر في المنتور شيب كان ذو اعلى معدل (٢.٧٦) و ادى على مستوى لاجل حمايه الطلاب. اعتقد الاساتذه ان في مجال العمل هناك اثر كبير للمنتور شيب على مستوى ايجاد حافز في العمل الحرفي عند الطلاب و نالك كان من خلال معدل (٤.٥٨). النمو العلمي و ارتقاء المستوى الحرفي في مجال العمل كان ذواعلى معدل (2.46).

الاستنتاج: يعتبر اليوم المنتور اهم تجربه تعليميه. هاليا يستخدم المنتور لتقليل مستوى التوتر عند الطلاب و لكن في المستقبل يساعد على تطوير العاله الحرفيه عند الطلاب و يرفع مستوى تقبل المسئوليات و يساعد حتى على اختيار مجال العمل عند المتعلمين. بناء على نالك يجب اجراء صفوف تعليميه قصيره الادم يتعلم فيها الاساتذه اصول تعليم كبار السن. الاهداف التعليميه. التقييم و ... مما يساعد لضا للاعلى تنقيف الاساتذه في مجال اجراء المنتور بشكل جيد.

الكلمات الرئيسيه: منتور شيب، منتور، الصيائت الشخصيه، حمايه الحرفيه.

ديدگاه اعضا هيئت علمي دانشگاه علوم پزشکی شیراز درباره منتور شيب در سال ١٣٨٩

منتور شپ کے بارے میں شیراز یونیورسٹی آف میڈیکل سائنس کے اکڈمیک کونسل کے اراکین کے نظریات.

مقدمه: منتور شيب، توسعه يك رابطه شخصي است كه در آن يك فرد با تجربه تر و آگاه تر به هدايت يك فرد كم تجربه تركمك مي كند. اين مطالعه با هدف بررسي وضعيت منتور شيب و تأثير آن از ديدگاه اساتيد باليني دانشگاه علوم پزشکی شیراز انجام شده است.

روش کار: در اين مطالعه ٩٩ مقطعي نفر از اساتيد باليني دانشكده پزشکی دانشگاه علوم پزشکی شیراز به صورت تصادفي و با روش نمونه گيري ساده وارد مطالعه شدند. جهت گردآوری داده ها از پرسشنامه روا و پایا با مقياس ٥ گزينه ای ليكرت استفاده شد. از اساتيد باليني خواسته شد تا نظرات خود را در رابطه با منتور شيب در وضعيت واقعي و ايده آل بيان نمايند. تجزيه و تحليل آماری با استفاده از نرم افزار SPSS 16 و آزمون های t-test, paired t-test انجام گردید.

نتایج: از میان ویژگی های مختلف، ویژگی "برانگیزاننده بودن" به عنوان مهم ترین ویژگی يك منتور ايده آل باليني (نمره میانگين: ٤.٦٧، انحراف معيار: ٠.٥٥) از دید اساتيد انتخاب شد. از میان اثرات ارتباط منتور شيب در بعد حمايت های شخصيتی و روانی بر دانشجویان، درحالت ايده آل، تأثير "افزايش مسئوليت پذيری" بيشترين نمره میانگين را داشت (٤.٩١). در شرايط واقعي، منتور شيب در "كاهش استرس" دانشجویان با نمره میانگين (٢.٧٦) بيشترين تأثير را در حمايت از دانشجویان ايفا کرد. در بعد موفقيت های شغلي ارتباط منتور شيب در دانشجویان، اساتيد معتقد بودند در حالت ايده آل "ايجاد انگيزه نسبت به حرفه" در دانشجویان با نمره میانگين (٤.٥٨) بالاترين ميزان اثر گذاری را دارا می باشد. در وضعيت واقعي "رشد علمي" و "ارتقای حرفه ای و موفقيت شغلي" در دانشجویان بالاترين نمره میانگين را داراست (٢.٤٦).

بحث و نتیجه گیری: امروزه منتورینگ به عنوان مهم ترین جنبه تجربه آموزشی محسوب می شود. در شرايط كنوني، بيشترين زمان منتورها صرف كاهش استرس فراگيران می شود، در حاليكه در وضعيت ايده آل، منتورها نه تنها به شكل دادن توسعه حرفه ای پزشكان آینده با بهبود افزايش مسئوليت پذيری آنها كمك می كنند بلکه انتخاب شغلي فراگيران را نيز تحت تأثير قرار می دهند. بنابراین با برگزاری كارگاه های آموزشی کوتاه مدت برای اساتيد و آموزش مواردی مانند اصول آموزش بزرگسالان، اهداف آموزشی، ارزشیابی، بازخورد و... می توان در توانمند تر کردن اساتيد برای ايفای نقش منتور گام برداشت.

واژه های کلیدی: منتور شيب، منتور، حمايت شخصيتی، حمايت شغلي

بیک گراوند: منتور شيب يك بايی رابطه به جس میں ایک تجربہ کار شخص ایک ناتجربہ کار شخص کی مدد کرکے اسے تعلیم دیتا ہے۔ اس تحقیق کا مقصد منتور شيب کے بارے میں شیراز یونیورسٹی آف میڈیکل سائنس کی اکڈمیک کونسل کے اراکین کے نظریات کا جائزہ لینا ہے۔

روش: اس تحقیق میں نانوائے کلینیکل اساتذہ نے شرکت کی، اس میں اساتذہ کو لائیکرت ماڈل کے پانچ سوالوں پر مبنی سوالات ڈئے گئے تھے۔ ڈیٹا کا تجزیہ ایس پی ایس ١٦، پیئرڈ ٹی ٹسٹ اور ٹی ٹسٹ سے کیا گیا۔

نتیجے: مختلف خصوصیات کے علاوہ مینٹور کی ایک اہم خصوصیت صلاحیتوں کو ممیز کرنا بھی ہے۔ مینٹور اپنے شاگردوں کی شخصیت کو ابھارتا ہے اور ان پر نفسیاتی لحاظ سے مثبت اثرات ڈالتا ہے۔ وہ طلباء میں احساس ذمہ داری ابھارتا ہے۔ اس تحقیق سے پتہ چلتا ہے کہ مینٹور شپ بحرانی حالات میں طلباء میں ذہنی دباؤ کم کرنے میں نہایت اہم کردار ادا کرتی ہے۔ پیشہ ورانہ لحاظ سے بھی مینٹور شپ طلباء میں پیشہ ورانہ صلاحیتوں کو ابھارنے میں کافی اہم کردار کی حامل ہے۔

نتیجے: آج منتورنگ کو تعلیمی لحاظ سے اہم ترین امر تصور کیا جاتا ہے۔ منتورز اپنا زیادہ تر وقت طلباء کی اسٹرس دور کرنے کے لئے صرف کرتے ہیں۔ منتور شپ سے نہ صرف میڈیکل پروفیشن کو ترقی ملتی ہے بلکہ طلباء میں احساس ذمہ داری بھی آجاتا ہے۔ سفارش کی جاتی ہے کہ طلباء کی کارکردگی کو بہتر بنانے کے لئے اس اصول کو اپنایا جائے۔

کلیدی الفاظ: منتور شپ، منتور، احساس ذمہ داری، پیشہ ورانہ مہارت.

INTRODUCTION

Mentor has an important role in the education and socialization of students. Education is not only conveying knowledge but is identification of resources, in order to help students gain the necessary experience and provide formal feedback. Mentor teaches his students how to turn their knowledge into practice and plays the roles of the therapist, consultant, educator, researcher and leader in bedside (4, 9, 10).

Medicine is one of the leading medical professions in the world, usually faced with many stressors, so medical students are faced with the stressful environment which can adversely affect a person's physical and mental health as well as career advancement. However; these effects can be reduced with proper training (1). On the other hand, Education & learning in clinical sections are important, complicated, and unpredictable. Clinical education is considered to be the core of professional education, since more than 50 percent of students' time is spent in clinic (2, 3).

Today Mentoring is considered as the most important aspect of the educational experience, and is an important process for improving the professional and lifelong psychological support that can be used to prevent anxiety, promote active learning activities create accountability and improve the confidence (1, 4).

Mentoring is often a long term professional relationship, and beneficial to both parties in which an experienced and knowledgeable person (Mentor) supports a person with less experience (dumplings) (5). Medical Mentoring is a process that fills the gap between education and the real world works. Mentors are experienced but everyone who is experienced and highly skilled is not Mentor. Skilled person offers an ingenious solution to the problem, but Mentor will guide them in the process of problem solving (6, 7).

Mentor and dumplings relationships are called mentorship. Mentorship, in fact, develops a personal relationship in which a more experienced and knowledgeable person helps a little experienced person. It is important to note Mentorship is a broad, long-term relationship between Mentor and student that the main purpose is to help little experienced people in a university. If this system is to be used in medical education, long-term relationship between teacher and student should always be considered (1, 4, 5, 6, and 7).

Mentoring creates job satisfaction, personal satisfaction and higher efficiency for maximum performance, so we should define a clear Mentorship relationship to reach the maximum satisfaction and efficiency. Mentoring has a very broad definition that is used at different times and locations, and includes several titles from the leader of a small group to the school counselor, trainer, supervisor, or a template. All of these have important roles in facilitating the acquisition of practical knowledge (5, 6,8).

In a review article entitled "Mentoring in Medicine (2006) systematically review the Mentorship issue in medical. It expressed though Mentorship has important influences on

job satisfaction, personality, career guidance, research and professional accomplishments and ultimately increases individual productivity, but evidence shows that less than 50% of medical students and 20% of faculty members have Mentor(4).

Mentoring programs on campus would seem to be necessary, also some factors like Unresponsive of Proven capabilities in responding to dynamic and diverse environment, Tendency of Staff and students to grow and develop the capabilities of them in their desired career path and need variety methods to increase knowledge and skills of career, Increasing in importance of tacit knowledge management and knowledge transfer to staff and students during work processes ,The need to immediately take advantage of learning from work experience to achieve optimum performance are the issues that have increased of addressing in Mentor, in today's organizations, especially universities.

Given the importance of Mentorship discussed in medical education and its many benefits and a serious need to efficient Mentoring Programs to improve student career in medical schools, we aimed to investigate mentorship status and its impact, in the viewpoint of clinical professors of medicine at Shiraz University of Medical Sciences (6).

METHODS

This study is a cross-sectional one. The subjects in this study were clinical professors of medicine at Shiraz University of Medical Sciences. The number of clinical professors was 300 and according to statistics advisor the sample size was 99; finally the simple random sampling method was used.

A questionnaire was used to collect data. Face and content validity and reliability of the questionnaire were checked. The questionnaires were completed by 44 teachers as the pilot. At the end of the questionnaire, the participants were asked to mention the problems of scale and ambiguous cases; also a number of them talked orally. So, necessary changes were made in the questionnaire. After a preliminary study, reliability of the questionnaire was approved with Cronbach's alpha coefficient to be 0.8.

The questionnaire consisted of two parts. The first section was about general demographic information and the second section was about Mentorship and its effects. The first section consists of 15 questions on a 5-choice Likert scale that features an ideal Mentor (such as being a consultant, being a role model, etc) from a score of 1 (not important) to score 5 (very important). In the second part of the questionnaire we examined the effectiveness of two categories: Mentorship career and personality and psychological support for students (dumplings) within 11 items, 6 items related to personal protection, and 5 items related to their career success. Statistical analysis was performed using SPSS 16 software. Also we used descriptive statistics (mean, SD, %, Frequency) and analysis statistics (t-test, paired t-test, and correlation).

RESULTS

99 clinical faculties entered this study. 51% of them were

male and 49% female. 66% of the faculty was Assistant professor, 24% Associate Professor, 5% Professor and 3% instructor. 80.9% of the participants were familiar with the term mentor; only 12.4% of the participants believed that in clinical field mentors and mentees should be of the same sex, but 72.2% of faculties stated that it makes no difference. Among the various features "being provocative (make a deep desire to learn)" was the most important feature (mean score: 4.67) and then "facilitator of learning" (mean score: 4.52) and being a role model (mean score: 4.50) were the most important features of an ideal clinical Mentor. Teachers also believed that the role of "provider of health services (health care)" was the least important feature.

Among the effects of mentorship on personality and psychological support on the students, in the ideal case, and the effect of "accountability incassation" had the highest mean score (4.91), "Social skills incassation" of students obtained the lowest mean score (4.35) by clinical faculty. The teachers believed that in real situation, "stress reduction" of students with a mean score of 2.76 and motivating students with a mean score of 2.74 was the most effective role of mentorship in supporting the students and social skills incassation with a mean score of 2.40 was the least effective one (Table 1).

At career supporting of the students, teachers believed in the ideal state "make motivation towards career" in students with a mean score of 4.58 had the highest impact, but "deep learning" in students with a mean score of 4.33 had the least effect. In the actual status, "scientific development" and "professional promoting and career success," in student had

the highest mean score (2.46) and "deep learning" of students had the lowest one (2.41) (Table 2).

DISCUSSION

Today Mentoring is considered as the most important aspect of the educational experience. (4) Process of Mentoring is discussed at the level of professional and psychological support. Professional development helps personal enrichment, a job selection, research improvement and overall it raises the productivity (5, 8, 11).

According to the finding of this study, most of the participants believed here is no problem if the Clinical Mentor and mentees are of the same sex. Other studies also show that factor such as race, gender, and ethics have no effect on Mentoring (12, 13).

Mentor has an important role in a good Mentoring relationship and plays different roles. Among the various features "being provocative (make a deep desire to learn)" were the most important feature and then "facilitator of learning" and being a role model were the most important features of an ideal clinical Mentor, according to clinical professors of medicine at Shiraz University of Medical Sciences. Also teachers believe that the role of "provider of health services (health care)" is the least important feature of a Mentor. In other studies, some roles of mentors such as leader, appraiser, feedback provider, supporter, prokaryotic, and facilitator have also been mentioned for a role model. Mentor motivates the students with guidance and encourages them. Thus, he/she can play an important part in one's success (6, 14, and 15).

Table 1. Effects of mentorship on personality support of the students in actual and ideal situations.

Effects of Mentorship at personality supporting of the students in actual and ideal situations.	Ideal State Average (SD)	Real State Average (SD)
To Decrease stress	4.59(0.63)	2.76(1.07)
To Increase accountability	4.91(4.25)	2.61(0.99)
To increase Confidence	4.55(0.72)	2.69(1.09)
To make motivation	4.64(0.69)	2.74(1.20)
To Increase social skills	4.35(0.75)	2.40(1.00)
To increase Communication skills	4.38(0.71)	2.46(0.97)

Table 2. Effects of Mentorship on career supporting of the students in actual and ideal situations

Effects of Mentorship at career supporting of the students in actual and ideal situation	Ideal State Average (SD)	Real State Average (SD)
Professional development and career success	4.45(0.74)	2.61(1.05)
Academic growth	4.55(0.64)	2.73(1.03)
Create professional attitude	4.58(0.63)	2.79(1.14)
To increase Capacity	4.42(0.78)	2.65(1.06)
Deep learning	4.33(0.83)	2.50(1.02)

Mentorship is effective at two categories of career and psychosocial support of students. Among the effects of mentorship on personality and psychological support of the students, in the ideal case, "accountability incassation" has the highest mean score but "social skills incassation" was the lowest mean score given by clinical faculty. This means that in the ideal case, Mentoring causes an increase in the sense of responsibility in students; therefore, they feel responsible to perform their duties and try to do their best. Also in the clinical area they feel responsible toward their patients and consider their rights. When the person is responsible for performing the duties of the job, he/she might try to do things appropriately, he/she would look for deep learning. Participants believe that in real situation, currently at Shiraz University of medical sciences, Mentorship has the greatest impact on "stress reduction" and "increasing motivation" but it has the lowest efficacy "in social skills". Medicine as one of the leading medical professions in the world is usually faced with many stressors and medical students are confronted with a stressful environment. This can adversely affect a person's physical and mental health as well as career advancement. Mentoring is one of the most effective ways to reduce stress and motivate the students. In the medical field due to the difficulties, motivation is essential as the driving dynamics. Participants believe that mentoring is less effective than other items to increase social skills in ideal and real conditions.

As to career success in students, we expected mentoring to influence "making a professional attitude to career"; however, at the real situation it has the greatest impact on "scientific development" and "promoting professional and career success". According to the participants, 'deep learning' should be the least effective part of this communication; also this feature has the least impact on students. As a result, to achieve the ideal conditions, Mentors should try more to create a positive attitude towards the medical profession in students. Results of other studies about mentoring are in agreement with results of this study (1, 4, 8, 16, and 17) a

systematic review about Mentoring Programs for Physicians in Academic Medicine showed that one barrier to mentoring programs in all over the world is limited resources (18). The limitation of this study is that we aimed to investigate mentorship status and its impact from viewpoint of clinical professors of Shiraz medical school. We couldn't observe their behavior in the real situation and we only asked their opinion about mentorship. It would be helpful to evaluate the effectiveness of the mentoring models development in future studies.

Since mentoring role of teachers in education has a good quality, participants should be aware of teaching and learning principles. To train teachers as a Mentor, we can use short-term courses and workshops and prepare some outlined such as learning and teaching process, adult learning principles, role clarity, setting educational goals, assessment and evaluation of learner and provide feedback. : Mentoring is as an important process for the professional development of learners. In today's situation the most time of mentors are spend of stress reduction of the students, However in ideal situation, positive mentors not only help to shape the professional development of our future physicians by improving the accountability incassation, they also influence their career choices. It appears that in selection of university professors as a mentor some principles and criteria such as flexibility and professionalism, enthusiasim toward the students for clinical practice, clinical characteristics and professionalism knowledge, interest in the role of Mentoring and adult learning issues should be considered.

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REFERENCES

1. Madhuri S, Kate UJK, Yashashrii Shetty and Y.A. Deshmukh. Mentoring for Medical Students. *Soc Sci* 2010; 2: 3.
2. Farshbaf Khalili A, Shahnazi M, Hajizadeh1 kh, Abaszadeh M, Strengths and Weaknesses of Clinical Education Settings from the Viewpoint of Midwifery Students and Educators of Tabriz University of Medical Sciences. *FUTURE of MEDICAL EDUCATION JOURNAL*. 2013; 3(3): 7-14
3. Yazdi Feyzabadi V, Komsari S, Nakhaee N, Amiresmaili MR, Mohammadtaghizadeh S. Analyzing the Quality Gap of Clinical Educational Services in Hospitals Affiliated with Kerman University of Medical Sciences. *Using SERVQUAL Method. FUTURE of MEDICAL EDUCATION JOURNAL*. 2014; 4(3):13-17
4. Sambunjak D, Straus SE, Marusic A. Mentoring in academic medicine: a systematic review. *JAMA* 2006;296(9): 1103-15.
5. Jackson VA, Palepu A, Szalacha L, Caswell C, Carr PL, Inui T. Having the right chemistry: A qualitative study of mentoring in academic medicine. *Acad Med* 2003;78(3): 328-34.
6. Rose GL RM, Schuckit MA. Informal mentoring between faculty and medical students. *Acad Med* 2005; 80(4): 344-8.
7. Jarjoura J. On mentorship putting the spotlight on practice: News you can use. *RNAO* 2003; 2(3): 1-3.
8. Aagaard EM, Hauer KE. A cross-sectional descriptive study of mentoring relationships formed by medical students. *J Gen Intern Med* 2003; 18(4): 298-302.
9. 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;25(1): 72-8.
10. Ahmadi A. Obstacles of clinical education and strategies for improving quality from the viewpoints of clinical instructors in Tehran's Nursing School. *Iranian journal of medical education* 2005; 5(2): 73-80. [In Persian].
11. Stenfors-Hayes T, Kalen S, Hult H,

- Dahlgren LO, Hindbeck H, Ponzer S. Being a mentor for undergraduate medical students enhances personal and professional development. *Med Teach* 2010; 32(2): 148-53.
12. Mitchell D, Feldman PAA, Marshall SJ, Lovett M, O'Sullivan P. Does mentoring matter: Results from a survey of faculty mentees at a large health sciences university. *Med Educ Online* 2010; 15: 103402
13. Wasserstein AG, Quistberg A, Shea JA. Mentoring at the University of Pennsylvania: Results of a Faculty Survey. *J Gen Intern Med* 2007; 22(2): 210-4.
14. Jaffer UV, Standfield N, John NW. Medical mentoring via the evolving world wide web. *J Surg Educ* 2013; 70(1): 121-8.
15. Mask LP. Mentoring faculty in academic medicine. *J Gen Intern Med* 2005; 20(9): 866-70.
16. Stenfors-Hayes T, Hult H, Dahlgren LO. What does it mean to be a mentor in medical education? *Med Teach* 2011; 33(8): e423-8.
17. Woods SK, Burgess L, Kaminetzky C, McNeill D, Pinheiro S, Heflin MT. Defining the roles of advisors and mentors in postgraduate medical education: Faculty perceptions, roles, responsibilities, and resource needs. *J Grad Med Educ* 2010; 2(2): 195-200.
18. Kashiwagi T, Varkey P, Cook A. Academic medicine. Mentoring programs for physicians in academic medicine: A systematic review. *Acad Med* 2013; 88(7): 82-9.