Abstract

Objectives: Ege University Medical School initiated system based integrated clinical internship in 2011. The need for a mentor who would closely monitor and guide the student in knowledge and skill gains for every clinical internship block and who would be an academic role model was well established. The aim of this study reports the results of the clinical internship mentoring program in the Ege University Medical School.

Methods: The Clinical Internship Counseling Committee reviewed similar programs in the literature, conducted focus group discussions, determined the wishes and needs of the students, and developed a mentoring program.

Results: The program was initiated by announcing the student-mentor matches and the procedure which was based on meetings of the student-mentor at the 1st, 8th and 13th weeks of the integrated internship. This meeting was designed to be a time for the mentor to guide the student to achieve the internship goals, to establish his/her internship progress file and to be an academic role model. At the final evaluation of the mentor, communication between student and the progress in the establishment of the internship progress file contributed to the 5% of the final internship success grade.

Conclusions: Evaluation of 7 years of experience led to the agreement that the goals of clinical internship program should be integrated into the newly established “Student Mentorship Program” that starts at the 1st year of the medical school.

Keywords: clinical internship; curriculum; medical education; medical student; mentoring.

Öz

Amaçlar: Ege Üniversitesi’nde 2011 yılında sistemlere dayalı entegre staj sistemi uygulanmaya başlanmıştır. Öğrencilerin bilgi ve beceri kazanımlarını izlemek, yol göstermek ve akademik rol model olmak amacıyla her staj
Introduction

Medical education programs aim to raise successful physicians by presenting an educational context related to the concepts of disease and health. The view regarding medical schools as “learning organizations” has become to be widely accepted in the early 1990s. Accordingly, medical education learns, changes, and evolves [1]. The most important indicator of this learning, change, and evolution is the change in medical education programs [2].

When the Ege University School of Medicine (EUSM) was established in 1955, it adopted a discipline based education program from among the medical education programs prevalent around the world. This approach, which lasted until the end of the 1980s, was replaced by organ-system based approach, and the education program was attempted to be integrated with an organ-systems context. In the process of change started with the participation of a wide faculty population in the early 2000s, the decision to apply internships in an integrated manner similar to the first 3 years of education was made in 2010. The current clinical internship programs were analyzed with the participation of faculties, the programs were integrated on a system basis, and clinical internship blocks to be applied in the fourth and 5th years were formed [3].

The clinical internship program in EUSM is applied in cycles of three clinical internship blocks each in the 4th and 5th years. The clinical internship blocks, spread over 13 weeks each, included theoretical courses, applied trainings, and independent learning hours at the clinics. The theoretical content of the clinical internship blocks were organized by determining the reasons for admission found in the high priority health problems study, the disease causing these reasons for admissions, and the learning levels related to those diseases [4]. The skill levels and goals appropriate to the theoretical content were determined, and the minimum number of skills that have to be exhibited by a student in one clinical internship block was found. All information regarding clinical internship blocks was compiled in a guide and presented to the students. Changes regarding the integration of clinical internship blocks, content organization, and application also changed the evaluation of clinical internship success. Theoretical and bedside skills and information were evaluated through written and verbal exams [5–8]. Student feedback is taken in clinical internship blocks just as in the first 3 years.

The clinical internship mentoring application was thought to be beneficial in observing whether the students reached the determined clinical internship goals and motivating students to reach those goals. A commission was established under the Medical School Deanship to establish, apply, and monitor the Clinical Internship Mentoring System [5].

In this article, the positive and negative results obtained in the process of forming and applying the mentoring system developed in 2011 is discussed. The system was initiated with the thought that the presence of a mentor who could meet the student, one on one, on the operation of the clinical internship would be beneficial in the integrated clinical internship system.

The formation and operation process of the clinical internship mentoring system

The aim of the clinical internship mentoring system

The aims of the Clinical Internship Mentoring System (CIMS) applied in EUSM are ensuring that the faculties attend students one on one with their academic and occupational skills, to monitor the skill and information acquisition of the students during integrated clinical internship applications, and to determine the problems that emerge during the operation of the clinical internships.

The aim was for the clinical internship mentor to help the student in reaching faculty graduation competencies step by step, and to play a role that makes clinical internship easier, that scientifically guides, and that guides towards an occupational future. However, the clinical internship mentor is not responsible for solving all of the
problems that can be encountered by the student during clinical internship. Additionally, no responsibilities such as mediation between students and other clinical faculties in cases of problems or intervening in the system were defined. The responsibilities expected to be fulfilled by the mentors in the first encounter are the discussion of guiding goals for the clinical internship, and making reaching those goals easier; in later encounters, the discussion of the benefits of the case presentations prepared by the student and the whole of the clinical internship, and the improvement of the social development and academic goals of the student are also expected. Helping the student gain the skills within the clinical internship portfolio is defined as the responsibility of the mentor.

The formation of the clinical internship mentoring system

The mentoring system was formed by the Clinical Internship Mentoring Commission formed by the Deanship through revising similar programs from global literature and performing interviews to determine the desires and needs of the students. As a result of these efforts, a unique clinical internship mentoring application for EUSM was formed within the context of integrated clinical internship applications.

The determination of the operation of the clinical internship mentoring system

The operation of the CIMS was determined by the Clinical internship Mentoring Commission. The operation of the system was briefly summarized below.

- The lists of the students to be counseled were communicated to the faculties by the registrar’s office. The faculty member was asked to interview the students in the 1st, 8th, and 13th weeks of the clinical internship block. In the first interview, the aim was to introduce the student to the faculty member and to provide information to the student regarding the operation of the mentoring system. In the second and third interviews, the aim was to communicate the positive and negative experiences of the students regarding the theoretical and applied education courses and to mutually exhibit the realization of clinical internship block goals. Another goal was to perform the control of the “clinical internship portfolio”. These forms are presented in their original version as Supplement Material, Figure 1 which the students were asked to fill out during the clinical internship block, in the accompaniment of the student and to monitor the student throughout the process. The student was asked to gather all benefits of the system in a file system, document everything done in the clinics, have the file signed by the faculty members, and present the file to the mentor at the end of the clinical internship period.

- The Clinical Internship Mentor Observation Form. These forms are presented in their original version as Supplement Material, Figure 2 was formed so that the mentor could record the interviews with the students throughout the clinical internship and determine the benefits and problems of the clinical internship.

- The mentor was asked to determine the mentoring grade of the student based on the observations throughout the clinical internship in the third and last interview. A scoring system was prepared so that an evaluation grade that would affect five points over 100 would be given to the student’s relation to the mentor. In this scoring, the student showing up to interviews with the mentor, the student adopting behavioral models appropriate to the notion of being a physician, and the preparation of the clinical internship portfolio would be taken into consideration.

- The operational principles of the commission and the mentoring system were determined and placed within the EUSM Education Directive [5]. The faculty members were informed on the subject. In order to incentivize faculty members for clinical internship mentoring, the process was listed under academic incentivization evaluation score C.

The execution of the Clinical Internship Mentoring System

All of the students were assigned a mentor for each integrated clinical internship block starting in the 2011 educational year. Both the student and the faculty member were informed on the match at the beginning of the clinical internship program, and the student was asked to see the faculty member. The mentors performed these interviews in the 1st, 8th, and 13th weeks with the students and discussed the whole of the clinical internship and the clinical internship goals stated in the clinical internship guide. The mentors stressed the importance of filling out the clinical internship portfolio and the role of the file as a guide for students to reach clinical internship goals. The mentors informed the students on how to fill out the portfolio and checked the progress of the students from the portfolio in the second and third interviews, helping the students with the problems they determined in filling out the portfolio and reaching the clinical internship goals.

Additionally, mentors and students who desired so met more than this minimum number of interviews. The mentor and the student sharing phone numbers and e-mail addresses for mutual communication in the first interview
and the determination and recording of future meetings by both sides ensured the healthy progress of the interviews.

The mentor and the student also interacted on the social and cultural opportunities provided by the university and the city besides academic mentoring. Certain mentors took up the roles of voluntarily providing tickets to students for concerts, movies, and shows, informing and guiding them on international advanced education possibilities, sharing life experiences, and guiding students for the solution of problems in cases where the student specifically asked for such.

The mentors recorded student interviews first on paper, and in the digital system developed by the faculty in later years. At the end of the clinical internship, they gave the student a mentor’s grade as suggested in the directive by taking into account the impression left in these interviews and the student’s desire to improve. In later years, the commission ensured that the mentor file and the clinical internship portfolio were put on the faculty website and could be downloaded and duplicated from this site. Later, the recording and grading of the mentor student interviews were transferred to a web based system.

Faculties who served as clinical internship mentors, besides grading the student, also reported problems in the execution of the mentoring system and the operation of the clinical internships to the commission through feedback.

The monitoring of the Clinical Internship Mentoring System by the Commission

The Clinical Internship Mentoring Commission performed a meeting at the end of each clinical internship block to review the experiences regarding the mentoring application in the relevant period. In the 1st years, the written forms filled out by the mentors in their interviews with the students were examined one by one by the members of the commission. Thus, detailed information on the interactions of mentors and students was obtained and the opportunity to monitor the operation of the clinical internship mentoring system was acquired.

After a student specific automation system was formed in our faculty, mentor grades and mentor feedback were taken through the automation system.

The Clinical Internship Mentoring Commission determined the positive and negative aspects encountered in the clinical internship mentoring system through such monitoring. The faculties usually answered open ended questions in this application on working and problematic aspects and reported the clinical internship related problems that formed obstacles before the success of students. The Clinical Internship Mentoring Commission gathered and evaluated the files filled out by faculty members from all departments, determined the problems in the mentoring system, provided feedback to the deanship for improvements, and revised the system alongside the dean and vice dean when necessary.

The positive and negative aspects of the mentoring system determined by the Clinical Internship Mentoring Commission were given below.

Positive aspects
- Mentors who motivated students, made participation in social activities easier, and guided students based on experience on occupational methods were seen to provide mentoring services that could constitute a role model.
- Especially those mentors who were more closely associated with education made appointments with the students, developed positive dialogs, and tried to find solutions to the students’ problems.
- Certain mentors were seen to make it easier for students to participate in activities that motivate the students such as shows and concerts, guide students on occupational methods based on experience, and suggest learning sources and books.

Negative aspects
- The mentoring model was not understood completely by some faculty members. Since the model did not work on a voluntary basis, there were many faculty members who did not want to interview the students or did not know what to do or how to help them when they did have the meetings.
- There were intermittent difficulties in student-mentor meetings, the students had to learn who their mentors were from the educational secretariat, and it was seen that they could not reach the mentors. It was seen that the appointment system did not work under these circumstances.
- In the clinical internship blocks that included many different clinics, mentors had to provide mentoring for clinics outside of their branch because of the characteristics of the integration model. Certain faculties stated that they had difficulty adapting to the system while providing mentoring for clinics outside their areas of expertise, and that they had difficulty providing academic mentoring.
- Especially after the student interview results were transferred to electronic recording, even the faculty members who classically gave better information on paper about the interviews and students preferred to leave evaluation to the secretariat. Thus, as a result of the entry of mentoring grades into the computerized
environment being performed by secretaries in many clinics, how much these students actually interacted with their mentors became vague. There were faculty members who stated that the interviews were more controlled and the operation of the mentoring system was monitored better in the commission evaluations at the end of the year when records were kept on paper as they were in the initial years.

The student-mentor meetings were not performed in the expected format. The clinical internship portfolio was not given sufficient importance either by the student or by the faculty member. The students did not desire to meet mentors or fill out detailed clinical internship portfolios for an insignificant five point grade raise.

Although the clinical internship portfolio was originally aimed to be inspected by the faculty member working one on one with the student in the clinic and evaluated by the faculty members performing oral exams at the end of the clinic, many faculty members were seen to leave the responsibility of the presence, importance, and necessity of this portfolio to the mentors, not desiring to perform those duties.

Especially in clinical internship blocks where different clinical internships were aligned with small intervals, the control of these portfolios were not effectively performed by clinician mentoring faculties. Even if the necessary applications for the skill goals in the portfolios were performed, the stamping and signing of these papers were not sufficiently performed by the attending physicians and assistants.

Because of these difficulties, the responsibility of controlling the clinical internship portfolio was taken from the mentors in the last year. However, the use of portfolio was seen to become even more nonfunctional in this case. Since the inspection of the clinical internship portfolio by clinical mentors or its use as an assessment and evaluation tool were not defined in the educational directive, only certain willing faculty members performed its inspection and evaluation during verbal exams.

The important issues pointed out by the students in feedback interviews regarding the clinical internship mentoring system were given below.

- The mentors should be informed on the clinical internship block (know the content of all of the 14 weeks) and share this information.
- The mentoring faculty member should meet the student at the beginning of the clinical internship, introduce the clinical internship to the student, stress important subjects, draw a clinical internship working plan for the student, help the student solve his/her problems throughout the clinical internship, and ensure that the missing points in education are checked out.
- The student should be reminded by the mentor of “the responsibility of saving human lives in the future”.
- The mentoring faculty member should review the portfolio prepared by the student, evaluate how much the necessary patient approach skills were gained in the clinical internship, and guide the student. This type of sharing between the mentor and the student can also be a part of other evaluation methods used throughout the clinical internship. For example, two or three of the reasons for admission determined for the clinical internship blocks can be the subject of verbal exams inspecting the portfolio.
- A lack of success in the mentoring system can be transferred to other students in following years, and students may stop meeting mentors. For this reason, mentors who do not volunteer should not be included in the system.
- The student should be able to choose his/her own mentoring faculty member.

The results of all of these experiences and detections over the course of 7 years were as follows:

- Mentoring should be structured on a voluntary basis. Grading for students and the addition of academic scores for faculty members did not provide sufficient incentivization. Different mechanisms to encourage students and faculty members to meet should be formed.
- Professional or semiprofessional mentoring trainings could be incentivizing or informative for clinical internship mentors.
- The student being followed by the same faculty member throughout his/her whole education starting from the 1st year would increase both motivation and the academic success of students.

The unification of the mentoring systems at EUSM

The clinical internship mentoring system was monitored for 7 years by the relevant commission. After the year 2017, a Student Mentoring System to replace the Clinical Internship Mentoring System that monitors, guides and supports students starting from the 1st year was thought to be more beneficial. At the end of the application period of
the clinical internship blocks of the 2018 educational year, the mentoring systems applied within the faculty were decided to be united under the Student Mentoring System [3] through the suggestion of the Clinical Internship Mentoring Commission and the decision of the Educational Commission. Thus, the Clinical Internship Mentoring Commission completed their 7 year effort and passed the responsibility to the Student Mentoring Commission. It was stressed that the clinical internship portfolio and the skill lists developed based on clinical internship goals should be continued to be used in clinical internship blocks. During the transfer of duty, it was also stressed that these educational materials should be used by the faculties working with the students in the clinical internships in the absence of mentors and that these materials should be used in independent learning hours at the clinic or as a part of clinical internship assessment methods such as verbal exams.

The Student Mentoring Commission adopted the goal of not limiting mentoring services to the clinical internship period and making them more widespread. Thus, faculty members in the faculty can realize their goal of socially, culturally, and academically supporting and mentoring students not only with regard to clinical internship blocks but throughout their whole education.

Conclusions

These efforts also pioneered the establishment of a more advanced student mentoring system that enables students to be monitored from the 1st years and throughout clinical internships.

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