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Türkiye’de Tıp Fakültesi Öğrencileri Bologna Sürecini Nasıl Algılıyor?

How Medical Student Perceive the Bologna Process: In Turkish Medical School

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Ege Üniversitesi Tıp fakültesi Tıp Eğitimi Anabilim Dalı

Anahtar Sözcükler:

Tıp öğrencisi, Avrupa yükseköğretim alanı, Bologna süreci, Erasmus değişim programı

Keywords:

Medical students, EHA, Bologna process, Erasmus exchange programs

ÖZET: Bologna süreci tüm yükseköğretim programlarında diploma eki verilmesi, ECTS kredilerinin saptanması ve değişim programlarının yürütülmesiyle ilgili on temel hedefi kapsamaktadır. Sürecin en önemli odağı yükseköğretimdeki öğrencidir. Bu araştırmanın amacı tıp fakültesi öğrencilerinin Bologna sürecinin eğitime yansımalarına ilişkin algılarını belirlemektir.

Ege Üniversitesi Tıp Fakültesi’nde yürütülen çalışma tarama modelindedir. Araştırma evreni tıp fakültesindeki tüm öğrencilerdir. Sınıflara göre tabakalı örneklem yöntemi ile 334 öğrenci belirlenmiştir. Çalışma verileri Yılmaz vd. (2011) tarafından geliştirilen, geçerlilik ve güvenilirliği saptanmış, Bologna süreci ile ilgili 45 başlıktan oluşan bir ölçek ile toplanmıştır. Ölçek 5’li Likert ile puanlanmaktadır.

Araştırmada yanıtlanma oranı % 96’dır. Bologna sürecinin hedefleri ile ilgili öğrencilerin en olumlu algıladıkları başlıklar: yabancı dil öğrenimini teşvik etmesi, değişim programlarını geliştirmesi, yurtdışında eğitim fırsatlarını artırmasıdır. Öğrencilerin % 28’i değişim programlarına katılmayı istemektedirler. Öğrencilerin % 8,4’ü Bologna sürecine ilişkin bilgi aldıklarını belirtmişlerdir.

Araştırma bulguları öğrencilerin süreç ile ilgili daha fazla bilgiye ihtiyacı olduğunu göstermiştir. Süreç hakkında bilgisi ve değişim programlarına katılma deneyimi olan öğretim üyeleri ve sürece uyum politikalarını belirleyip uygulayan okul yöneticileri bu ihtiyacın giderilmesinde görev almalıdır.

The Bologna process has ten key objectives related to giving a diploma supplement in all higher education programs. The most important focus of the process is the students in higher education. The aim of the study is to determine medical students’ perceptions of the Bologna process.

The study conducted at Ege University Faculty of Medicine is a cross-sectional study. Using the stratified sampling method, 334 students from different classes were selected. Data were collected with a scale developed by Yılmaz et al. (2011). The scale consists of 45 items which were rated on a 5-point Likert type.

The response rate was 96%. Of the objectives of the Bologna process, the ones the students

perceived most positively are as follows: the process encourages foreign language learning; the process develops the exchange programs; the process increases opportunities to study abroad. Twenty-eight percent of the students wanted to join the Erasmus program. 8.40 % of the students were informed about the Bologna process.

The students needed more information about the process. Faculty members who are more knowledgeable about the process and who have participated in exchange programs, and school administrators who identify and implement adaptation policies should be involved in meeting this need of students.

Introduction:

Higher education institutions in Europe have entered into a process of change in the last 20 years. With the Bologna Declaration initially signed by the European Union countries, higher education institutions in different countries had an opportunity to cooperate and to conduct joined programs (Oliver and Sanz, 2007; Patricio et al., 2008; Cumming, 2010; Patricio and Harden, 2010; Çelik, 2012). Over the years, with the joining of countries outside the European Union, the system called Bologna process has expanded (Patricio et al., 2008; Çelik, 2012).

The main purpose in the Bologna process is to achieve improvements in higher education programs which will contribute to the economy of the country, to raise students', faculty members' and administrators' awareness, to put the student-faculty member exchange into effect and to monitor the process at periodic intervals (EUA Trends Reports; Yağcı, 2010; Sin, 2012). With this purpose in mind, the Bologna Declaration signatory countries have been reviewing their higher education programs, and

making the necessary improvements. While some countries manage the process with a fast and centrist perspective (Yağcı, 2010), other countries manage it in cooperation with the interested parties (Sin, 2012). Both of the approaches lead to some differences in the effective promotion and understanding of the Bologna process (Patricio et al., 2008; Cumming, 2010; Patricio and Harden, 2010; Ballarino and Perotti, 2012).

Currently, 47 countries are involved in the Bologna process. Turkey was involved in the process in 2001 when it attended the Prague meeting (Yağcı, 2010). It fully adopted the objectives of Bologna process and put them into practice. There are a limited number of reports on the implementation of the Bologna process in Turkey and its effects on higher education (Turkish National Agency, 2009; Yağcı, 2010; Kasapoğlu and Balcı, 2010; Çelik, 2012). Its implications on medical education in Turkey have not been evaluated yet. Since the beginning of the process, the signatory countries have aimed to adapt all higher education programs including medical education programs to the objectives of the Bologna process. The adaptation of medical education programs did not draw much attention in the early years of the Bologna process (Christensen, 2004; Patricio et al., 2008; Yağcı, 2010). The results of a survey conducted in 2007 revealed some doubts about the adaptation of medical education programs (Patricio et al., 2008). Especially AMEE, WFME, IFMSA and EMSA conducted studies to demonstrate that medical education programs could be adapted to the Bologna process and they made some recommendations (WFME Standarts, 2003; Rigby, 2007; Karle, 2008b; Statment, 2010; Cumming, 2010; Patricio and Harden, 2010). There are organizations such as EMSA in which students participate in decision-making mechanisms in the Bologna process (Christensen, 2004). In Turkey, there are

student organizations in medical faculties which maintain relationships with EMSA (IFMSA-International Federation of Medical Students' Associations, 2005; EMSA, Turkey).

In December 2002, European Commission signed a series of agreements with the Turkish authorities to finance a cycle of preparatory measures and pilot actions to prepare Turkey's participation in Socrates Program. Ege University had been selected as a pilot university and was among one of the 15 Turkish universities for the preparatory measures and pilot actions of Socrates Program by the Turkish National Agency. Turkey's first Erasmus students were sent to Portugal-Porto University by Ege University.

Diploma Supplement Label was awarded to Ege University by the European Commission for the periods of 2005-2009 and 2009-2013 (Ege Üniversitesi Öğrenci Bilgi Sistemi-ebys). Ege University is one of the Turkish universities with the highest number of exchange students and staff through the Erasmus Program. It has developed 475 bilateral agreements with 340 European universities in 24 European Union member states within the scope of Erasmus Program for 2013-2014 academic years. Ege University confirms full academic recognition for mobility activities- the study period abroad replaces a comparable period of study at Ege University provides a booklet for students willing to participate in the exchange programs of Faculty of Medicine (EUFM Ege University Faculty of Medicine, 2008). The booklet contains useful information for exchange students. The institutional coordinator is responsible for the administrative procedures of Erasmus exchange programs.

The purpose of this study is to determine Ege University Faculty of Medicine students' perceptions of the Bologna Process.

Methods

The study is a cross-sectional one. The study data were collected from the medical students of Ege University Faculty of Medicine in March 2012. Stratified sampling and simple random sampling techniques were used to determine the sample. In the stratified sampling technique, the following formula was used: "the number of the students in each class / the number of the students in the faculty x 100". Based on the rates calculated, the number of the students to be included in the sample from each class was determined. To reach the number of students set for each class, the simple random sampling technique (skipping 5-7 students) was used. The stratifying rate was calculated including all the students in the faculty (n: 1961) and ranged between 13.92 % and 20.04 % from one class to another. The number of students selected for the study was 334 .

Instrument

The study data were collected using a self-reported 45-item scale related to the 10 objectives of the Bologna process. The scale is a 5-point Likert type scale. The scores for each item range from 1 (strongly disagree) to 5 (strongly agree). The scale was developed by Yılmaz et al (2011). Its validity and reliability were confirmed (α : 0.93). The scale is one-dimensional. However, the 45 items related to the 10 objectives of the Bologna Process were grouped according to the relationship between the students and the education program. The relationship with the education program includes the following: goal, objective, content, learning, assessment, exchange program and application groups. At the beginning of scale, there is a section in which the Bologna process is defined. In addition, information both on the aim of the study and on the reliability of the data was given in this section, and the participants' oral consents were obtained. The possible minimum and maximum scores to be obtained

Class		1	2	3	4	5	6
Gender [n (%)]	Female	23 (37.70)	27 (41.50)	26 (44.10)	19 (43.20)	26 (55.30)	20 (44.40)
	Male	38 (62.30)	38 (58.50)	33 (55.90)	25 (56.80)	21 (44.70)	25 (55.60)
Age (Mean \pm SD)		19.48 \pm 1.48	20.06 \pm 1.10	20.88 \pm 1.34	22.16 \pm 1.01	23.09 \pm 1.06	23.82 \pm 0.96
Education levels of mother [n (%)]	Junior high school or lower	22 (36.10)	29 (44.60)	17 (28.80)	17 (38.60)	20 (42.60)	17 (37.80)
	High school/ university	39 (63.90)	36 (55.40)	42 (71.20)	27 (61.40)	27 (57.40)	28 (62.20)
Education levels of father [n (%)]	Junior high school or lower	13 (21.30)	17 (26.20)	3 (5.10)	10 (22.70)	7 (14.90)	10 (22.20)
	High school/ university	48 (78.70)	48 (73.80)	56 (94.90)	34 (77.30)	40 (85.10)	35 (77.80)
Participation in the Erasmus exchange program	Yes	27 (44.30)	29 (44.60)	19 (32.20)	6 (13.60)	7 (14.90)	2 (4.40)
	No	34 (55.70)	36 (55.40)	40 (67.80)	38 (86.40)	40 (85.10)	43 (95.60)

from the scale are 45 and 225 respectively (Yılmaz et al., 2011). The higher scores indicate that the students' perceptions of the topic are more positive.

Data were collected in a single session with the self-reported method. In addition, the students were asked to indicate their year in education gender, age, parents' education level, whether they considered participating in the Erasmus exchange program, whether they were informed of the Bologna process, and the source they wanted to receive information about the Bologna process.

Ethical approval

This study was approved by the University of Ege Faculty of Medicine Ethic Committee (project no.11-12.2/3 28.02.2012). After the aim of the study was explained to the participants, their informed consents were obtained.

Data analysis

For the analysis of the study data the descriptive statistics, Student t-test and One-way ANOVA were used. The α value was accepted as 0.05. The statistical analysis was performed using PASW statistics for Windows (SPSS, Inc, IBM) version 21.0.

Results

The response rate in this present study was 96 % (n: 321). The mean age of the students was 21.36 ± 1.96 (min: 18 max: 27). Sixty-two percent of the students' mothers and 81.30 % of the students' fathers had high school / university. Table 1 shows the descriptive data regarding the classes.

Twenty-eight percent of the students wanted to join the Erasmus program due to the following reasons: to develop themselves professionally, to recognize different cultures, to have a foreign language education, to go abroad, to recognize different educational systems, to gain experience and to travel. The countries the students were willing to go to within the Erasmus exchange program were Germany, Portugal, Poland, Greece and the USA. Seventy-two percent of the students did not consider attending Erasmus exchange program due to the following reasons: being unable to speak a foreign language fluently, fear of being unable to adapt to a different culture, considering exchange programs unbeneficial, having insufficient school grades to join the program, losing a school year due to exchange, financial problems and lack of confidence. Some of the students stated that they would not join the program because they were foreign students. While 8.40 % of the students were informed about the Bologna process, 91.6 % were not.

Of the students who were not informed about the process, 44.60 % preferred to be informed about the process by their faculty members and administrators.

Students' perceptions of the Bologna process

The mean total score obtained from the scale including the 10 objectives at the beginning of the Bologna process was of 143.58 ± 24.96 (min: 56 max: 220). Of the scores obtained from the scale, 49.50 % were above the average. The approximation rate to the maximum score (ARMS), to be obtained from the scale was calculated using the following formula: observed score / expected score $\times 100$. Higher ARMS scores indicate that students have positive perceptions of Bologna process. ARMS for the whole scale was 63.81 %. When the items of the scale were grouped according to the

relationship with the education program, ARMS was calculated (Table 2 and Figure 1).

	The number of the items	Expected max. score	Observed score
Goal	7	35	22.33
Objective	16	80	51.83
Content	4	20	12.58
Learning	6	30	18.91
Assessment	4	20	12.35
Exchange program	6	30	21.02
Application	2	10	4.34

Figure 1. The approximation rate to the maximum score

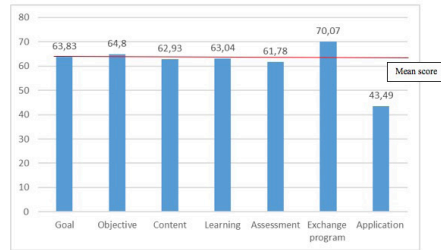


Table 3. Items which received the highest and lowest scores from the scale related to the Bologna process

	Mean (SD)	Min-Max	Median
Seven items which received the highest scores			
The process enhances the importance of learning a foreign language.	3.75 (0.97)		
Insufficient information about exchange programs adversely affects participation.	3.67 (0.88)		
That the universities in Turkey are not known well enough reduces participation in exchange programs.	3.60 (0.95)		
The process develops student exchange programs.	3.55 (0.88)	1-5	4
Insufficient sources of finance create barriers to participation in exchange programs.	3.55 (0.95)		
Language problem creates barriers to participation in exchange programs.	3.54 (0.92)		
The process increases educational opportunities abroad.	3.53 (0.87)		
Seven items which received the lowest scores			
My advisor informs me enough.	2.14 (0.99)		
Enough announcements regarding the process are made.	2.21 (1.07)		
The process helps reduce unemployment with vocational training programs.	2.79 (0.98)		
The process is focused on the assessment of students' individual success.	2.81 (0.90)	1-5	2-3
The process provides equality of opportunity in education.	2.87 (0.96)		
The process regulates courses by taking students' individual development into account.	2.95 (0.95)		
The process helps individuals to get prepared in accordance with today's changing work force demands.	2.97 (0.85)		

The ARMS was the highest for the items related to the exchange programs (such as visa, additional financing, language learning). The ARMS was the lowest for the items related to applications. Applications are related with students' being informed by the counselor or the institution about the Bologna process.

The items which received the highest and lowest scores from the scale are presented in Table 3. Of the seven items which received the highest scores from the scale, three are related to the goals and four are related to the exchange program. Of the objectives of the Bologna process, the following are the ones the students perceived most positively: the process encourages foreign language learning; the process develops the exchange programs; the process increases opportunities to study abroad. The items which also received high scores from the scale but negatively affected participation in exchange programs are as follows: universities in Turkey are not known well enough; lack of additional sources of finance; not being able to speak a foreign language. The items related to "not providing sufficient information about the Bologna process" received the lowest scores from the scale. The other items which also

received low scores are as follows: the Bologna process ensures equality in education; the process supports students on individual achievements; education programs are designed according to students' needs and changing workforce. The mean scores for the remaining 31 items range between 3.05 ± 0.94 and 3.45 ± 1.00 .

Medical students' perceptions of the implications of the Bologna process on their education did not vary in terms of their years in class (F: 1.87; p: 0.09). The differences between medical students' perceptions of the implications of the Bologna Process on their education were assessed in terms of the following variables: the students' gender, parents' education levels, intent to participate in the Erasmus exchange program, being informed of the process (Table 4).

The students' perceptions of the Bologna process did not differ in terms of gender. Mother's education level did not affect the students' perceptions. The students whose fathers had high school /university had more favorable perceptions of the Bologna process than did the other students (t: 2.08; p: 0.03). The students who intended to participate in the Erasmus exchange program had more positive perceptions of the

Table 4. The mean total scores obtained from the scale in terms of some variables

		N	Mean (SD)	t	p
Gender	Female	141	145.22 (21.27)	1.07	0.28
	Male	180	142.29 (27.50)		
Mother's education level	Junior high school or lower	122	142.41 (27.14)	0.65	0.51
	High school / university	199	144.29 (23.57)		
Father's education level	Junior high school or lower	60	137.56 (28.22)	2.08	0.03*
	High school / university	261	144.96 (24.00)		
Intention to participate in the exchange program	Yes	90	149.51 (27.10)	2.68	0.01*
	No	231	141.27 (23.74)		
Being informed	Yes	27	135.33 (35.76)	1.28	0.21
	No	294	144.34 (23.67)		

Bologna process than the other students did (t: 2.68, p: 0.01). Being informed of the Bologna process did not affect the mean scores of the students who were informed of the process. Contrary to expectations, the mean scores of the students who were not informed of the process were higher.

Discussion

This study aims to determine the medical students' perceptions of the Bologna process. The mean total score obtained from the scale including the 10 objectives at the beginning of the Bologna process was of 143.58 ± 24.96 . ARMS for the whole scale 63.81 %. The ARMS was the lowest for the items related to application of the Bologna process in the education program and the highest for the items related to the exchange programs.

Of the seven items which received the highest scores from the scale, three are related to the goals and four are related to the exchange program. The items related to "not providing sufficient information about the Bologna process" received the lowest scores from the scale.

The students whose fathers had high school / university had more favorable perceptions of the Bologna process than did the other students. The students who intended to participate in the Erasmus exchange program had more positive perceptions of the Bologna process than the other students did.

In studies conducted in Ege University Faculty of Medicine and Faculty of Education, the items receiving the lowest scores are about the issues such as "the students are not informed about the Bologna process adequately"; "announcements regarding the process are not made"; "the Bologna process adequately contributes to employment and creates equality of opportunity in education". Briefly, when students are informed about the Bologna process, their

awareness of the objectives of the process will increase (Yılmaz et al., 2011).

The students whose fathers had high school and/or higher education had a higher mean score for their perceptions of the Bologna process. Öncü and Demiral Yılmaz's (2012) and Yılmaz et al.'s (2011) studies support these findings (Yılmaz et al., 2011; Öncü and Demiral Yılmaz, 2012). In our country, children's awareness levels are affected by their fathers' education level due to the father's decision-making role in the Turkish family.

In Turkey, the Bologna process is generally perceived as a student exchange program. Moreover, the word "Erasmus" is used instead of the term "the Bologna process". Therefore, the students perceived the items related to the exchange program better.

While 28 % of the students considered participating in the exchange programs, 72 % did not. The students wanted to participate in the Erasmus program due to the following reasons: to develop themselves professionally, to recognize different cultures, to have a foreign language education, to go abroad, to recognize different educational systems, to gain experience and to travel. In van Den Broek et al.'s (2013) study, it was determined that most of the students preferred to go abroad in order to travel and gain knowledge and experience rather than get medical education (van Den Broek et al., 2013). Students perceive exchange programs as a way of going abroad. In Öncü and Demiral Yılmaz's (2012) study, 74.7 % of the students did not have any intention to participate in an exchange program (Öncü and Demiral Yılmaz, 2012). In a study conducted at Ege University Faculty of Education, 78.4 % of the students did not want to participate in an exchange program (Yılmaz et al., 2011). In studies conducted by Öncü and Demiral Yılmaz (2012) in a faculty of medicine in a different city and by Yılmaz et al. (2011) in Ege University Faculty of Education,

the students had similar perceptions about participating in exchange programs (Yılmaz et al., 2011; Öncü and Demiral Yılmaz, 2012). Therefore, it can be said that neither the faculty students attend nor the city they live in but person-specific factors affect their decision to participate in exchange programs. The faculty the students attended or the city they lived in did not affect their willingness to participate in the exchange program. Students in different faculties of the same university (e.g. medical faculty and faculty of education) or in the same kind of faculty (e.g. medical faculties) in different cities displayed similar willingness to participate in the exchange program. Individual factors specific to students affect their willingness to participate in exchange program. Analysis of such items as being unable to speak a foreign language fluently, fear of being unable to adapt to a different culture, no interest in exchange programs, considering exchange programs unbeneficial, having insufficient school grades to join the program, losing a school year due to exchange, financial problems and lack of confidence the students stated as reasons not to participate in exchange programs revealed that Turkish university students are generally inhibited and need to be encouraged (European Commission Public Opinion). With the Bologna process, higher education institutions have begun to open the door to practices enabling students to learn about not only their own culture and country but also different countries and cultures. Similarly, the study by Vincent et al. emphasized the importance of speaking a foreign language to benefiting from higher education opportunities abroad (Vincent et al., 2008). Students mostly perceive the Bologna process as foreign language education, exchange programs and opportunities to study abroad (Yağcı, 2010). It is obvious that describing the objectives and opportunities of the Bologna process correctly will affect students' perceptions of the process positively.

Of the students, 91.6 % in the present study, 96.5 % in Öncü and Demiral Yılmaz's (2012) study and 98.6 % in Yılmaz et al.'s (2011) study stated that students were not provided any information about the Bologna process (Yılmaz et al., 2011; Öncü and Demiral Yılmaz, 2012). The fact that students were not informed about the process adequately may have caused a large number of them not to consider participating in the exchange programs. It is expected that students will be more willing to participate in exchange programs if they are effectively informed of the process. Of the medical students, 44.6 % in Ege University and 41.2 % in Adnan Menderes University wanted to be provided information about the Bologna process by their faculty members and administrators. Of the medical students attending Ege University Faculty of Education, 58.6 % wanted to be informed in the same way. In Ege University, there are International Affairs and European Union Offices. Each faculty is represented in these offices. Although universities have administrative offices to provide information about the Bologna process, the fact that a large proportion of students do not receive information from these offices and they prefer to be informed by the faculty members and administrators is meaningful. This indicates that informing process is not appropriately achieved with the current administrative structure.

The students included in the study perceive the Bologna process as a practice which increases the importance of learning a foreign language, improves student exchange programs and increases opportunities to study abroad. These results are consistent with those obtained in Öncü and Demiral Yılmaz's (2012) and Yılmaz et al.'s (2011) studies (Yılmaz et al., 2011; Öncü and Demiral Yılmaz, 2012). It can be said that the items which promoted students' own interests received higher scores.

Conclusions

In addition to quality processes such as the Bologna process, the Erasmus exchange program which makes student and faculty members exchange between higher education institutions plays an important role in making universities more appealing. The Erasmus exchange program offers significant opportunities for exchanging people and ideas which is one of the distinguishing features of higher education (Hasdemir and Çalıkoğlu, 2011). The Erasmus exchange program is one of the ways used to achieve the goals of the Bologna process.

Strategies adopted by countries while they involve in the Bologna process differ (Sin, 2012). While some countries adapt to the process in a short time, some countries collaborate with higher education institutions in adapting to the process and thus it takes them longer to adapt to the process (Papatsiba, 2006; Patricio et al., 2008; Ballarino and Perotti, 2012). In order to shorten the adaptation process, countries make legal arrangements without taking the views of the institutions and make it imperative to adapt to the Bologna process (Patricio et al., 2008). In Turkey which participated in the Bologna process in 2001, legal arrangements related to the adaptation to the process are made with a centrist approach (Yağcı, 2010; Çelik, 2012; Patricio et al. 2012). This approach used to adapt to the Bologna process leads to the development of resistance to the process. It also causes the objectives of the process to be understood inadequately and harmonization studies to be conducted unwillingly. Offices established in the institutions with legal arrangements to maintain harmonization studies cannot contact with the students sufficiently due to the above-mentioned reasons and thus cannot help the students to develop positive perceptions of the process.

Insufficient promotion of the Bologna process in higher education institutions plays an important

role in medical students' being reluctant to participate in exchange programs, one of the objectives of the Bologna process. In medical education, integration level (basic and clinical sciences), the content of the program (priority health problems), and patient-physician communication vary from one country to another. These factors make it difficult for medical students to continue medical education in different countries. Problems in speaking a foreign language together with these factors discourage students from going abroad (Patricio et al., 2012).

With further studies on the issue, the implications of the Bologna process on medical education should be evaluated considering students' and faculty members' point of view, and education policies of faculties. Students should be aware of the contents of counseling services. They should also be willing and be encouraged to get information about the Bologna process. Faculty members should be knowledgeable about the positive and negative implications of the Bologna process (Sin, 2012) and be able to provide counseling to students when needed. Medical faculty administrators should adopt a policy on the Bologna process and establish an appropriate environment to make this policy known and shared in the school (Ballarino and Perotti, 2012; Sin, 2012)

In conclusion, the Bologna process which began in 1999 will inevitably affect higher education programs within the European Union and non-European Union countries. Therefore, in studies on higher education, it should be kept in mind that students are of great importance when considering the Bologna process's contribution to the development of the culture of living together within the diversity of societies

Limitations

The most important limitation of this study was that we were not able to find studies conducted to evaluate the Bologna process on medical

training programs from students' perspectives.

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References

1. Ballarino, G., Perotti, L. (2012). The Bologna Process in Italy. *European Journal of Education*, 47 (3), 348-363.
2. Christensen, L. (2004). The Bologna Process and Medical Education. *Medical Teacher*, 26 (7), 625-629.
3. Cumming, A. (2010). The Bologna Process, Medical Education and Integrated Learning. *Medical Teacher*, 32 (4), 316-318.
4. Çelik, Z. (2012). The impacts of Bologna process on European Higher Education Systems. *Journal of Higher Education and Science*, 2 (2), 100-105.
5. Ege Üniversitesi Öğrenci Bilgi Sistemi (ebys). [cited September 2013]. Available at: <http://ebys.ege.edu.tr/ogrenci/ebp/international-affairs.htm>
6. EMSA, Turkey. [cited September 2013]. Available at: <http://emsa-turkey.com>
7. EUA Trends Reports. [cited September 2013]. Available at: http://www.ond.vlaanderen.be/hogeronderwijs/bologna/documents/EUA_Trends_Reports.htm
8. EUFM Ege University Faculty of Medicine 2008. [cited October 2013]. Available at: http://med.ege.edu.tr/image/EUFM_ERASMUS_IP_Updated_2008.pdf
9. European Commision Public Opinion. [cited October 2013]. Available at: http://ec.europa.eu/public_opinion/flash/fl_260_en.pdf
10. IFMSA-International Federation of Medical Students' Associations, (2005). The Bologna Declaration and Medical Education: A Policy Statement from the Medical Students of Europe. *Medical Teacher*, 27 (1), 83-85.
11. Karle, H. (2008b). World Federation for Medical Education Policy on international recognition of medical schools' programme. *Ann Acad Med Singapore*, 37, 1041-1043.
12. Kasapoğlu, R., Balcı, A. (2010). Erasmus Öğrenci Öğrenim Hareketliliği Programının 2007 Yılında Programdan Yararlanan Türk Öğrenciler Üzerindeki Etkileri. *Avrupa Çalışmaları Dergisi*, 9 (2), 93-116.
13. Oliver, R., Sanz. M. (2007). The Bologna Process and Health Science Education: Times are changing. *Medical Education*, 41, 309-317.
- Öncü, S., Demiral Yılmaz, N. (2012). Tıp Fakültesi Öğrencilerinin Bologna Sürecine İlişkin Algıları: Adnan Menderes Üniversitesi Tıp Fakültesi Örneği, In proceedings. VII.

National Medical Education Congress, Ankara, Turkey.

14. Patricio, M., den Engelsen, C., Tseng, D., Ten Cate, O. (2008). Implementation of the Bologna two-cycle system in medical education: Where do we stand in 2007? – Results of an AMEE-MEDINE survey. *Medical Teacher*, 30 (6), 597-605.

15. Patricio, M., Harden, R.M. (2010). The Bologna process-A global vision for the future of medical education. *Medical Teacher*, 32 (4), 305-315.

16. Patricio, M., de Burbure, C., Joa~ O Costa, M., Schirlo, C., Ten Cate, O. (2012). Bologna in Medicine Anno 2012: Experiences of European medical schools that implemented a Bologna two-cycle curriculum-An AMEE-MEDINE2 survey. *Medical Teacher*, 34, 821-832.

17. Papatsiba, V. (2006). Making Higher Education More European Through Student Mobility? Revisiting EU Initiatives in the context of the Bologna process. *Comparative Education*, 42 (1), 93-111.

18. Rigby, E. (2007). Taking forward aims of the Bologna Declaration: European core curriculum-The student's perspective. *Medical Teacher*, 29, 83-84.

19. Sin, C. (2012). Academic understandings of and Responses to Bologna: a three-country perspective. *European Journal of Education*, 47 (3), 392-404.

20. Statement, (2010). The Bologna Process and its implications for medical education. *Medical Teacher*, 32, 302-304.

21. Turkish National Agency, (2009). The Life Long Learning Programme (LLP) In Turkey: Impact Assessment Report National Agency The Centre for EU Education and Youth Programmes. [cited September 2013]. Available at: <http://www.ua.gov.tr/docs/magazine/llp-%C4%B1impact-assessment1102.pdf?sfvrsn=0>
van Den Broek, S., Cate, O.T., Wijnen-Meijer, M., van Dijk, M. (2014). Effect of the Bologna bachelor degree on considerations of medical students to interrupt or terminate their medical training. *Medical Teacher*, 36 (2), 169-174.

22. Vincent, K., Moreira, G., Boersma, K. (2008). The Role of language in the internationalisation of Higher Education: an example from Portugal.

23. *European Journal of Education*, 43 (2), 241-255.

24. WFME Standarts, (2003). Basic Medical Education WFME Global Standards for Quality Improvement, University of Copenhagen Denmark.

25. Yağcı, Y. (2010). A different view of the Bologna Process: the case of Turkey. *European Journal of Education*, 45 (4), 588-600.

26. Yılmaz, N., Arlı, D., Yalçinkaya, M. (2011) Eğitim Fakültesi Öğrencilerinin Bologna Sürecine İlişkin Görüşleri, Oral presentation, In proceedings, VI. National Education Administration Congress, Gazimagusa, Cyprus.