

A Comparative Study of Knowledge and Satisfaction of Faculty Members and Students with Education Development Center Activities (Babol-2010)

دراسة مقایسه‌ی نسبه‌ی وعی و رضی اعضاء المجلس العلمی و طلاب جامعة العلوم الطبیه بشأن مركز تطوير دراسات التعليم الطبی

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Background: Educational Development Center (EDC) establishment is one of the procedures to improve quality of medical education. As positive knowledge and attitude of lecturers and students are essential factors to gain access to goals of these centers, the aim of this project was to assess knowledge and satisfaction of faculty members and students about EDC activities, Babol-2010.

Methods: This project is a descriptive-analytical and cross-sectional study which was done using questionnaire among 147 faculty members, 75 residents and 80 interns. Samples were collected using randomized, census and simple sampling methods, respectively. Data were analyzed using Chi square, ANOVA and T-tests.

Results: According our results, mean of the knowledge score (in a scale of 0-15) among faculty members was higher than residents and interns (9.48 compare with 4.36 and 7.67). ANOVA test results showed that there was a significant difference between them ($P < 0.05$). Also, Pearson correlation calculation revealed that there were positive and significant correlations between years of experience and teaching experience among faculty members and the knowledge score. Our results regarding satisfaction of EDC activities (in a scale of 0-5) demonstrated that faculty members had the highest mean score in comparison with residents and interns (2.86, 2 and 1.83, respectively).

Conclusions: Although faculty members had a better knowledge and attitude regarding EDC activities compare with residents and interns, but continuous education, discussion session and rewarding measures are necessary in order to improve condition.

Key words: Knowledge, Medical education, Faculty members, Interns, Residents, Education, satisfaction

بررسی مقایسه‌ی ای میزان آگاهی و رضایت اعضای هیات علمی و دانشجویان دانشکده علوم پزشکی بابل درباره مرکز مطالعات و توسعه آموزش علوم پزشکی

زمینه و هدف: تاسیس مراکز مطالعات و توسعه آموزش علوم پزشکی یکی از اقداماتی است که در راستای ارتقای کیفیت دانش آموختگان علوم پزشکی به اجرا گذارده شد. نظر به اینکه دستیابی به اهداف چنین مراکزی مستلزم آگاهی و نگرش مثبت اساتید و دانشجویان نسبت به آنهاست، در این مطالعه وضعیت آگاهی و نگرش آنان در خصوص عملکرد، برنامه‌ها و امکانات مرکز مطالعات و توسعه آموزش علوم پزشکی دانشگاه علوم پزشکی بابل مورد بررسی قرار گرفت.

روش: این پژوهش بصورت مقطعی و توصیفی-تحلیلی با استفاده از فرم جمع آوری اطلاعات محقق ساخته در میان ۱۴۷ تن از اعضای هیات علمی، ۷۵ دانشجوی مقطع دستیاری و ۸۰ نفر از اینترن‌ها به اجرا در آمد. نمونه‌ها به ترتیب بصورت تصادفی ساده، سرشماری و روش آسان جمع آوری گردیدند.

یافته‌ها: میانگین امتیاز آشنایی و آگاهی از عملکرد مرکز مطالعات و توسعه آموزش پزشکی (بر اساس مقیاسی از ۰ تا ۱۵) در اعضای هیات علمی بیش از دستیاران و کارورزان بوده است (۹/۴۸ در مقایسه با ۴/۳۶ و ۷/۶۴)، ($P < 0.05$). همچنین همبستگی مثبت و معنی داری بین سابقه کار و سابقه تدریس در اعضای هیات علمی با میانگین امتیاز آگاهی از مرکز مطالعات و توسعه آموزش پزشکی وجود داشت ($P < 0.05$). ارزیابی میزان رضایت از عملکرد مرکز (بر اساس مقیاسی از ۰ تا ۵) نشان داده است که میانگین امتیاز رضایت در اعضای هیات علمی حائز بالاترین مقدار در مقایسه با دستیاران و اینترن‌ها بود (به ترتیب ۲/۸۶ و ۱/۸۳).

نتیجه‌گیری: هرچند آگاهی و نگرش اعضای هیات علمی در رابطه با فعالیت‌های مرکز مطالعات و توسعه آموزش علوم پزشکی از وضعیت نسبتاً مطلوب و در مقایسه با دستیاران و کارورزان از شرایط بهتری برخوردار است اما ضرورت استمرار برنامه‌های آموزشی، جلسه‌های توجیهی و بکارگیری مکانیزم‌های تشویقی به منظور بهبود وضعیت موجود بویژه برای دستیاران و اینترن‌ها همچنان مشهود است.

واژه‌های کلیدی: آگاهی، آموزش پزشکی، اعضای هیات علمی، کارورز، دستیار، مرکز مطالعات و توسعه آموزش علوم پزشکی، رضایت.

الذمّة: أن تأسيس مراكز تطوير دراسات التعليم الطبى لى احدى التدابير الرامية لإرتقاء مستوى متعلمين العلوم الطبیه، و لتحقیق الصفاف مثل هذه المراكز يجب أن يكون لدى الأساتذة و الطلاب نظره واعیه و إيجابیه، فى هذه الدرأه مدرس مدى اطلاعهم و نظرتهم بالنسبه للاداء و البرامج و الامكانات المتاحة فى مركز تطوير دراسات التعليم الطبى فى جامعة العلوم الطبیه فى بابل .

الأسلوب: هذا البحث تم بطريقه مقطعيه و توصيفيه، تحليليه حيث استفاد المحقق من معلومات من ۱۴۷ شخص من اعضاء المجلس العلمى و ۷۵ طالب مرمله "مساعدر" ۸۰ شخص "مدررب" جمعت العينات بالترتيب التالى المشوائى البسيط . الإحصاء، و الطريقه السريه . و لمعالجه البيانات تم الإستفاده من اختبارات الإحصاء، تى . كاي دو و التحليل "آماليز و واريانس " **النتائج:** متوسط إمتيازات المعرفة والوعى عن الطريقه عمل مركز ألابحاث و تطوير التعليم الطبى "على اساس المقياس من ۰ الى ۵) كان لدى اعضاء المجلس العلمى أكثر المساعدرين و المدرربين (۹.۴۸) با لمقايسه إلى ۴.۳۶ و ۷.۶۴) و النتائج الحاصله من تحليل التفاوت الظهر اختلاف ذو معنى احصائى ($p < 0.05$) كما أن حاصل النتائج من تعيين «ضرب همبستگى بيرسون» يشير إلى وجود إرتباط ذات معنى بين الخبرة العملية و الخبرة فى مجال التدريس لدى اعضاء المجلس العلمى مع متوسط تقييم الوعى عن مركز تطوير دراسات التعليم الطبى. ($P < 0.05$) تقييم مدى الرضى عن طريقه عمل المركز «بحسب المقياس من ۰ إلى ۵» يظهر أن اعضاء المجلس العلمى حاز على اعلى نسبة بالمقايسه مع المساعدرين و المدرربين «بالترتيب التالى ۲.۸۶ و ۱.۸۳» .

الإستنتاج: على الرغم من أن وعى و نظره اعضاء المجلس العلمى بالنسبه لتفاعليات مركز الأبحاث و تطوير دراسات التعليم الطبى افضل من المساعدرين و المدرربين و ظروفهم افضل إلا انه من الضرورى استمرار البرامج التعليميه . و جلسات التوعيه و الإستفاده من الیه الترغيب لتحصين وضع المساعدرين و المدرربين .

الكلمات الرئيسية: الوعى، التعليم الطبى، اعضاء المجلس العلمى، المدرربين، المساعدر، مركز الأبحاث و تطوير دراسات التعليم الطبى، الرضا.

طبی علوم اور طبی تعلیم کے ترقیاتی مرکز سے اکیڈمیک کونسل کے اراکین اور طلباء کی آگہی اور رضایت کا جائزہ

بیک گراؤنڈ: طبی علوم کے اسٹڈی اور ترقیاتی مراکز کا قیام علم طب سے منسلک افراد کے علم اور آگہی میں اضافہ کرنے کی غرض سے عمل میں آیا ہے۔ ان مراکز کا فائدہ اسی وقت ہوسکتا ہے جب طب سے منسلک اساتذہ اور طلباء ان سے استفادہ کریں۔ اس تحقیق کا مقصد بابل یونیورسٹی آف میڈیکل سائنس میں قائم کئے گئے ایسے مراکز کی کارکردگی، ان کے منصوبوں اور وسائل و ذرائع سے اساتذہ اور طلباء کی آگہی اور ان کے بارے میں ان کی نظر کا جائزہ لینے کے لئے انجام دی گئی ہے۔

روش: یہ ایک وقتی تجزیاتی تحقیق ہے جس میں اکیڈمیک کونسل کے ایک سو سینتالیس اراکین اور پچھتر طلباء کو نیز اسی ۸۰ انٹرن شپ کے طلباء کو سوالنامہ دئے گئے تھے۔ تحقیق میں شرکت کرنے والوں کو ریڈم طریقے سے چنا گیا تھا۔ سوالناموں کا تجزیہ اینالاؤز ویریس سے کیا گیا۔

نتائج: اسٹڈی اور ترقیاتی مراکز سے آشنائی اور ان کے کارکردگی سے آگہی کی شرح (صفر سے لیکر پندرہ نمبروں میں) اکیڈمیک کونسل کے اراکین میں طلباء اور انٹرن شپ کے طلباء سے زیادہ تھی یہ شرح نواعشاریہ چار آٹھ تھی جبکہ طلباء اور انٹرن شپ کے طلباء میں یہ شرح چار اعشاریہ تین چھ اور سات اعشاریہ چھ تھی۔ اینالاؤز ویریس سے تجزیہ کئے جانے پر ان دونوں کے درمیان خاصہ فرق تھا۔ پٹیرسن کونسل ایڈیشن پروگرام سے تجزیہ کئے جانے پر کام اور تدریس کے تجربوں میں معنی خیز ہمانگی پائی گئی، اس سے پتہ چلتا تھا کہ اکیڈمیک کونسل کے اراکین بہتر طور پر طبی علوم کے مراکز سے استفادہ کرتے ہیں۔

سفارشات: گرچہ علوم طب کے اسٹڈی مراکز سے استفادہ کرنے میں اکیڈمیک کونسل کے اراکین سب سے آگے ہیں لیکن طلباء اور انٹرن شپ کے طلباء کی پوزیشن کو اس سلسلے میں بہتر بنانے کی ضرورت ہے۔ اساتذہ کے لئے مزید بہتر پروگراموں اور شوق دلانے کے امور کی ضرورت ہے تاکہ وہ مزید بہتر طریقے سے طبی مراکز سے استفادہ کرسکیں البتہ ان پروگراموں میں طلباء اور انٹرن شپ کے طلباء کو بھی نہیں بھولنا چاہیے۔

کلیدی الفاظ: اکیڈمیک کونسل کے اراکین، انٹرن شپ، طبی مراکز۔

INTRODUCTION

Improving the quality is considered as one of the basic goals all around the world(1,2) and the topic of quality improvement in medical education is a necessity which has attracted the attention of people in charge, following considerable increase in the number of medical sciences learners during more than two decades. Reviewing course schedules, establishing Education Development Centers (EDC), establishing and developing Clinical skill centers, preparing the background for performing distance learning and etc. are proofs of this claim (3-5). Various studies have shown that existing weaknesses in fields such as article writing, research plan, study skills, learning, and interpersonal relations have decreased education efficiency considerably (2). It's clear that for improving the activities of faculty members and students in each of the last fields needs appropriate activities of Education Development Centers. It seems that according to the results of recent studies, faculty members and students are not still aware of mentioned activities or a considerable number of them are optimistic about the function of these centers. For example, in a study by Taheri et al. about the awareness of faculty members, specialists, residents, and interns of Ghazvin University of Medical Sciences of the tasks of EDC, it became clear that the least awareness in the case of the tasks of the center related to interns and faculty members who were more informed than the non-faculty clinical members. However, the rate of correct answers to questions among faculty members was less than 60% in average. Also the most participation in giving suggestions for improving training process in medicine in university was related to interns (82%) and the least cases went to faculty members (46%) (3). In another study by Jalili et al. about the viewpoints of Kerman University of Medical Sciences faculty members (145 people) in the case of EDC activities, faculty members had an almost positive viewpoint toward EDC activities and they got 78.7% of the whole score (4).

According to the fact that being aware of the activities of the centers and satisfaction or agreement in the case of practical fields for achieving the goals is necessary, we determined to assess the current status by studying the knowledge rate and viewpoint of faculty members and students of Babol University of Medical Sciences toward EDC activities.

METHODS

This study was a cross-sectional, descriptive-analytical one which was conducted among three groups including faculty

members in faculties such as medicine, para medicine, and dentistry, residents and interns of medical school of Babol University of Medical Sciences. The process of data **collection was as follows:** half of the faculty members were chosen randomly according to the personnel office list, all residents were chosen through census, and interns were selected through access method and their number was equal to that of residents.

Filling and collecting, questionnaires was done in faculties in the case of basic sciences faculty members and in the case of residents, interns, and clinical faculty members in treatment education centers during 2010.

Data collection forms of faculty members and residents were totally similar and included 13 open ended questions and 10 multiple choice questions. All the closed questions related to knowledge but open-ended questions related to knowledge and viewpoint. Data collection form of the interns was rather similar to that of the two other groups with a few differences.

Assessing total satisfaction rate of mentioned groups of the activities of EDC was done through using zero to five scale. In this scale which was planned by calibration line, zero meet the least satisfaction and five meant most satisfaction.

For data processing SPSS, t-test, chi-square, Variance analysis, Pearson Correlation coefficient and non-parametric tests of Mann-Whitney, and Spearman correlation coefficient were used. $P < 0.05$ was considered significant.

RESULTS

Processing data of the three groups of faculty members (147 people), residents (75 people), and interns (80 people) from the point of age and gender distribution showed that almost rather equal samples were gathered from both genders and totally 52.6% of the participants were males.

The highest frequency rate of participants from the point of age group related to the group of 40-49 (57.8%). Mean age and standard deviation of the under study groups of faculty members, residents, and interns were 24.8 ± 1.6 , 32.7 ± 5.8 , and 44 ± 7.6 respectively.

In table 1 the executive responsibility experience of faculty members and residents in different fields such as educational, research, cultural, or official is presented. As it can be seen almost less than 25% of the participants had had such a record and based on their statements about 79% hadn't had such a record. However according to little possibility of executive, educational, or research experience among interns, they were not questioned in this case.

Table 1. The distribution of frequency and percent of executive responsibility record among faculty members and residents of Babol University of Medical Sciences.

Responsibility record	n (%)
Having educational responsibly record	22 (9.9)
Having research responsibility record	3 (1.4)
Having educational-research responsibility record	9 (4.1)
Having official-cultural-health responsibility record	13 (5.8)
Without responsibility	175 (78.8)
Total	222 (100)

In the case of the relatedness of the topic of the study with work record or teaching record in university, the results showed that among residents only 11 people had execution record and 5 people had teaching record in Higher Education Institutes. Faculty members all had such records and the average of their working and teaching in university were 10.97 ± 8.02 and 11.65 ± 8.18 respectively.

In table 2, data related to knowledge status of faculty members, residents, and interns and in table 3, this status is given separately according to each question of the study. It is worth mentioning that for processing this part of the data, not having any knowledge equaled zero and in contrast familiarity, cooperation, or using the services achieved one score.

Variance analysis test showed a significant difference in the knowledge rate of them toward EDC ($P < 0.05$). The highest score related to faculty members and the lowest score was that of residents, of course except two cases (Talented Students unit and Student Committee of EDC) in which the score of interns was more than faculty members. Totally the most knowledge related to one question which was

familiarity of the Persian name of EDC and the least knowledge related to familiarity with Community Oriented Medical Education.

Process of data separated by gender, with t-test showed that the scores of males and females except very few differences were not significantly different. Of course in faculty members' group the score of females was higher than males but in residents' group the score of males was more than females. On the other hand, results of data process in the case of the score of basic sciences faculty members expressed that their scores of knowledge and familiarity were higher than clinical faculty members (10.35 ± 3.1 and 9 ± 3.2 respectively) and based on T-test the difference has been significant ($P < 0.05$).

chi-square test in the case of the score of each of the three groups showed that the achieved score which means faculty members and interns' knowledge has been significantly higher than residents. ($P < 0.05$)

The study of the relationship between variables such as work record and teaching record among faculty members

Table 2. The score of faculty members' and interns' knowledge about EDC of Babol University of Medical Sciences.

Group	Frequency	Mean (SD)	Min	Max
Faculty members	147	9.48 (3.3)	2	15
Residents	75	4.36 (2.9)	0	13
Interns	80	7.64 (4)	1	15

Table 3. Relative frequency of positive answers in the case of residents; and interns' knowledge of EDC activities.

Questions about informedness	Faculty members (n=147)	Residents (n=75)	Interns (n=80)	Total (n=302)
Knowledge of Persian name of EDC	85	48	83.8	75.5
Knowledge of complete word of EDC	82.3	52	58.8	68.5
Knowledge of subcategories of deputies	78.1	52	47.5	67.9
Familiarity with instructor training unit	73.5	21.3	28.8	48.7
Familiarity with lesson plan committee	74.8	16	20	45.7
Familiarity with student assessment committee	68.7	16	40	48
Familiarity with talented students unit	32.7	16	50	33
Familiarity with research in education unit	61.2	24	47.5	48.3
Familiarity with instructor assessment unit	69.4	38.7	62.5	59.9
Familiarity with Skill lab unit	52.4	33.3	75	53.5
Familiarity with	42.9	20	18.8	30.8
Familiarity with student committee of EDC	36.7	26.7	61.3	40.7
Knowing the location of EDC	81	44	73.8	69.9
Familiarity with at least one of the faculty members; personnel of EDC	69.4	24	60	55.6

and residents with their familiarity viewpoint toward the activities of EDC was another topic of this research. The results showed that with the increase of job and teaching experiences among faculty members, their knowledge also increased as well, however it was not the same among residents. Conducting variance analysis test in the case of the relationship between job experiences and achieved score in faculty members' group showed a statically significant relation ($P < 0.05$) but such relationship was not found in the case of teaching experiences. This assessment was not done with taking in to consideration that the number of participants has not been enough in the group of residents. According to the few number of residents with job experience (4 people out of 54), data processing was just done in faculty member group as follows (table 4).

A-With or without job record

B-Without having execution responsibility, responsibly less than 4 years and more than 4 years (It is worth mentioning that the determination of 4 years of job experiences has been according to the closeness of the number of samples and experiences more or less than that) The results showed that the mean of the achieved scores in members with executive responsibly experiences was more than that of members without such record and also the mean of scores among participants having record of more than 4 years, was higher than the mean score of participants having record of less than 4 years. Also according to the result of variance-analysis test, the scores of the two groups were significantly different ($P < 0.05$).

Another topic of discussion of this study was the assessment of the satisfaction rate of the three groups with the activities of EDC by using a numeral scale of zero (the least satisfaction) to five (complete satisfaction). As it can be seen in table 5, the highest satisfaction rate related to

faculty members and the least related to interns.

Conducting variance-analysis test in the case of satisfaction rate of understudy groups of the activities of EDC expressed that according to the scores, faculty members were significantly more satisfied than the two other groups. ($P < 0.05$)

DISCUSSION

The conducted study among 302 faculty members and students of Babol University of Medical Sciences showed that the mean of the achieved score of the four open-ended questions and ten multiple questions in the case of familiarity with EDC, has been more among faculty members than residents and interns. Doing statistical test of variance analysis showed a significant difference in score of this group and the two others ($P < 0.05$).

This result had been in accordance with the results of another study by Taheri et al. in 1385 in Ghazvin University of Medical Sciences entitled "The study of knowledge of faculty members, specialists residents, and interns of Ghazvin University of Medical Sciences of EDC tasks" (3), in this study faculty members were more informed and familiar than specialists, residents, and interns. Of course it is worth mentioning that in contrast with the results of the mentioned study, interns of Babol University of Medical Sciences were more familiar than residents and the achieved score by this group was significantly more than the residents' (average score of 7.64 compared with 4.36).

The reason of such issues in results can be related to an active committee of students called "EDC Student Committee" in Babol University of Medical Sciences which has led to more familiarly of interns with different units and their activities.

However the results of Ziaee et al.'s study entitled "the study

Table 4. The score of knowledge of faculty members of EDC separated by executive responsibility.

Processing status	Executive responsibility record	n	Mean (SD)	Min	Max	P Value
A	Without responsibility	97	8.84 (3.3)	2	15	<0.05
	With responsibility	50	10.72 (2.9)	4	15	
B	Without responsibility	97	8.84 (3.3)	2	15	<0.05
	Record less than 4 years	28	10.54 (3.3)	4	15	
	Record more than 4 years	22	10.95 (2.3)	6	15	

Table 5. The score of satisfaction with EDC activities in under study groups.

Group	n	Mean (SD)	Min	Max
Faculty member	115	2.86 (1.2)	0	5
Resident	42	2 (1.3)	0	5
Interns	87	1.83 (1.3)	0	5
Total	235	2.37 (1.3)		

of the viewpoints of students of Birjand University of Medical Sciences toward instructors' assessment from 2003 to 2004" showed rather different results. In the mentioned research which was conducted through questioning 280 medical students, 81.4% of the students were not aware of the Assessment Center (EDC) (6). The reason of such a considerable difference can be related to conducting the study among all levels of medical students (basic sciences, staggers, interns) in contrast with the present study which was just conducted among interns.

In the study conducted by Jalili et al. in the case of EDC activities from the viewpoint of faculty members of Kerman University of Medical Sciences, more than 60 percent of faculty members agreed and had a positive point of view in all the questioned cases (4). This can be a confirm of the familiarity of faculty members with EDC activities and on the other hand it confirms the achieved results among faculty members of Babol University of Medical Sciences. As it can be seen in table 2, the mean of positive answers about familiarity of faculty members with EDC and its activities has been more than 60% which is while being harmonious with the results of the mentioned study, clarifying a similar status of this university with at least one of the other medical sciences universities of the country.

In another study entitled "viewpoints of faculty members of Gorgan University of Medical Sciences toward lesson plan" conducted by Mansoorian et al. which was published in 1387, familiarity of 14.76% of faculty members with EDC tasks was reported as very little. (7)

With a more cautious look at the achieved score in each of the questions (table 3), it is observed that the highest achieved score almost in all the three groups related to the Persian name of EDC and awareness of this English equivalent which in other words expresses a general and superficial familiarity of the center. On the other hand, while the questions were more precise and subcategories of this center were the topic of question, a considerable number of participants were not informed. This result in a way expresses the necessity of providing programs in order to get more familiar with EDC and its units and activities. Getting favorable results and achieving the goals are somehow away from the mouth under such conditions.

Another important point in the results is getting the lowest score in the case of familiarity with community oriented medical education units. In seems that in contrast with the confrontation record of facing with such topic during educational processes in all the three groups, because of the existing lacks in activities of this field, participants had little information and this condition is logically harmonious with the current status.

The comparison of the achieved scores in the case of males and females' knowledge in each of the three groups was done by t-test and it showed that although there were few differences, but the difference of scores in none of the groups was significant. Of course this comparison has been significant among basic sciences faculty members and clinical faculty members and the total of achieved scores of basic sciences faculty members was more than clinical faculty members. This could be related to the working of a large number of clinical faculty members in private

sectors and offices which naturally reduces their chance of following educational issues and removing them from educational concerns and issues related to EDC activities. A part of it can also be related to the weakness in EDC mechanisms and shortcoming of methods or the necessary facilities for attracting the cooperation of clinical faculty members. However similar results in other studies have also been reported. For example in a study done by Mansoorian et al. about the view point of faculty members of Gorgan University of Medical Science toward lesson plan, there has been a significant difference between the negative viewpoint toward lesson plan among basic sciences and clinical faculty members (7).

According to table 5 the study of satisfaction rate of the function of EDC was another aim of this research in which field faculty members (with the average of 2.86 in the scale of zero to five) were more satisfied than residents or interns (with the average of 1.13 and 2 respectively). In the case of this result it must be said that according to the topic of the relationship of EDC activities with educational activities of faculty members and on the other hand variety and volume of the given services from this center, it's natural that instructors are more satisfied than residents and interns but on the other hand, achieving the score of 2.86 out of 5 may express a kind of dissatisfaction with the activities of the mentioned center. Its reason may be due to different matters such as lack of precise familiarity with EDC and its activities (according to the results of this study) or other issues mentioned in other studies. Among which not pleasant introduction of activities and holding briefing classes for audience group, lack of clear orientation in activities, lack of experts of medical education, weakness in establishments and program follow ups, being part-time of some of the personnel, not valuing the education equal with treatment, not spending technical training courses, confusion in management system of such centers and etc. can be notified (3, 5,6,8-10). But it is worth mentioning that in the case of low satisfaction rate of students, according to the experience of one of the authors one of the influential factors of dissatisfaction of students is not getting feed back; in other words no change happens in methodology or educational behavior of infrastructures after collecting students' opinions which should be given to students by Education Deputy of the university.

Finally it has to be mentioned that the achieved results in this study like a lot of other studies are not staying safe from possible mistakes and errors in the plan of study, function of researchers, data collection tools, conduction of the study and judging the results and it's clear that complete certainty about the results need more accurate and developed studies in the case of each of the topics under study.

In contrast with the rather favorable status of the knowledge and viewpoint of faculty members of Babol University of Medical Sciences toward EDC and its functions, the essentiality of caring more about other audiences of this center such as residents and students of different levels of medical sciences becomes clear. It is worth mentioning that besides taking the necessary actions for omitting the lacks and deficiencies according to

the instructor' and students' opinions, the people in charge have to try their best for improving the infrastructures and developing the quality of education.

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