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Survey of Students' Viewpoint on Medicine Disciplinary basic Sciences Education (Case Study: Islamic Azad University, Ardabil Branch)

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ABSTRACT

Educational evaluation is a formal activity to determine goal attainment educational programs and educational evaluation deals with gathering Information and Judging about educational activities. The aim of this research was evaluating of medicine disciplinary basic sciences education in Islamic Azad University Ardabil Branch by systemic model. The methodology used in this research was descriptive study from survey type. The population consisted of all medicine disciplinary students of Islamic Azad University Ardabil at 2015 year, and the sample was 162 people that were selected by random sampling, and required data have been collected by using questionnaire. The Validity of Questionnaire was confirmed by experts and reliability by coefficient alpha Cronbach was 0/961. Collected data were analyzed by statistics: mean frequency & percent. The findings showed that: 56/8% of students believe the status quo in the basic sciences inputs was intermediate, and 10/5% of students believe the status quo in the basic sciences inputs was high. 61/7% of students believe the status quo in the basic sciences process was intermediate, and 12/3% of students believe the status quo in the basic sciences process was high. 59/3% of students believe the status quo in the basic sciences outputs was intermediate, and 28/4% of students believe the status quo in the basic sciences outputs was high. The current situation of basic sciences of medicine disciplinary was intermediate. The Will be offered at other universities as they evaluate their education based on systemic to improve the situation. @A.I.A Journals

Keywords: *educational evaluation, systemic model, medicine basic sciences.*

Introduction

The social responsibility of higher education institutes requires universities to ensure that graduates have acquired the necessary knowledge, skills and competences. Therefore, it is essential to evaluate university activities (Benjamin & Klein, 2006). The social commitment of higher education makes it compulsory for the community to provide its educational, research and service facilities, using its relative privilege in the freedom and scientific and operational autonomy. In general, social commitment is a form of contract and moral commitment to higher education in society, against the resources it receives (Hosseini & Bazargan, 2009). Out of

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the major elements of the higher education system, student is the key element, and student view is very important in educational evaluation. In this regard, the faculty of medicine has a special place because it directly deals with human resources training to maintain and improve society health. Given global developments, medical faculties will have to pay more attention to quality improvement, innovation, productivity, and intense competition with rivals (Wood, 2009). Overall, educational program evaluation is not a new concept and has been around for decades. Following this program, multiple evaluation models have been adapted by and developed for educational settings; among the most popular were the objectives oriented, input/output models, and comprehensive evaluation. In summary, program evaluation is an important aspect of educational administrators' daily work (Parylo, 2012).

In Iran, higher education institutes provide the society with educational services under the supervision of two ministries (the Ministry of Science, Research & Technology, and the Ministry of Health and Medical Education). Medicine, dealing with human and society health in general, is included in the Ministry of Health and Medical Education. Considering the critical role of medicine in society and its relevance to human health, medical education is presented with high sensitivity in the country (Ministry of Health and Medical Education, 2009). In Iran, there are various studies on the quality of theoretical and clinical educations. Although most of such studies reported a gap in the quality of educational services, the degree of gap varies in different aspects of the quality of service (Khalooei & Karbakhsh, 2018). The quality of the educational system consists of several factors: quality of performance, instructors, teaching, allocation of resources, general goals and curriculum, the environment of learning and teaching, human resources, learning resources, organizing courses, teaching and learning activities, learners, assessment and supervision, student activity, outputs, outcomes, and quality control (Ahmadi & Freydoni, 2018). If the performance appraisal of organizations is done correctly and consistently, they will improve the organization's accountability, public trust, resource management, customer satisfaction, national development assistance, create new capabilities, sustainability, and the promotion of a global class of organizations (Tayebi & Koosha, 2016).

Medical education in Iran, as in many countries in the world, is presented at three levels of undergraduate medical education, graduate medical education, and continuing medical education. In order to improve medical education and make necessary changes in it, scholars and educators in medical education, to eliminate the inadequacies in education Medicine, suggested corrective steps (Ghasemi et al, 2018). According to the basic standards of Iran's medical education, the general medicine training system is responsible for training graduates who are able to provide a wide range of health services and play the role of a manager, a researcher and an instructor in compliance with the standards of professional ethics (Ministry of Health and Medical Education, 2009).

The Stufflebeam, in 1983, proved that among the evaluation models, the system model is a very useful approach to educational evaluation. Based on the CIPP (content, input, process, and product) model, the most important goal is to improve training courses. In addition, the CIPP model provides information that can be used by decision-makers of educational institutions to evaluate programs (Mazloomi & Moradi, 2018). These three elements should interact with the surrounding environment insofar as inputs result in the expected outputs after passing through the transformation process. The main aim of input evaluation is to help codify a plan which is designed to make educational changes and achieve the determined objectives. Input evaluation is related to the resources and strategies required for the realization of primary and secondary objectives. Process evaluation includes the collection of evaluation data which are obtained during the implementation. In process evaluation, an evaluator is asked to design a data collection system for monitoring the daily implementation of the curriculum. The output evaluation determines how much the curriculum objectives are achieved. In this kind of evaluation, the measurement tools of objective fulfillment are codified and implemented. The resultant data can be used in managers' decisions based on continuing or modifying the curriculum. The aim of output evaluation is to measure, interpret and judge the results of the curriculum. In today's world, student view about all the aspects of educations provided in higher education institutes is taken as the main element for monitoring the quality of universities. Regarding educational evaluation models, the system model pays special attention to student view

(Porsafar, 2007). Student evaluations play two different roles. They are used for both evaluation and monitoring of teachers and for development of teaching/courses (Spooren, Dimitri & Christiaens, 2014).

At universities in many countries, course evaluations are routinely undertaken on a systematic basis using different, but usually in-house standardized, evaluation questionnaires (Kember, Leung & Kwan, 2002). Such evaluations may be useful for educational administrators, since they provide an inexpensive way to keep track of students' satisfaction with teaching and to possibly expose teachers that cannot teach. It is conceivable that student feedback can be used for administrative decision-making, if the evaluation questionnaires or other evaluation tools are properly designed relative to a set of criteria of effectiveness (Nielsen & Kreinerb, 2017). In order to bring about improvements in the medical education system in recent years; some universities have used the strategy to integrate basic science and clinical science education curriculum. The integration of these courses leads to subject coordination in the minds of students and increases the quality of education. This is done in order to create an appropriate educational environment and to increase the level of medical students' learning (Amiri, Seif-Rabiei, Maghsudi, Khatami & Sanaei, 2018).

The basic sciences of medicine are very important in understanding the principles of prevention, diagnosis and treatment. Knowing the educational status of basic sciences helps make decisions and plans based on accurate information so that decisions can be supported (Mojtahedzade, Mohammadi & Karimi, 2018). In the following, the brief results of some relevant studies are discussed.

The results of a study conducted by Naderi et al. indicate that the majority of students have been satisfied with basic sciences teachers in terms of compliance with ethics, punctuality, mastery of scientific concepts, the proper use of full class time, compliance with the sequence of materials, and the ability to lead the class. The weak points were reported to be inappropriate class times, improper class conditions, inadequate access to teachers, teacher's poor performance in motivating students to study, no time allocated to fix student problems' problems, lack of students' participation in discussions, lack of summarizing the materials, and the inefficient use of supplementary tools (Naderi et al, 2011).

In a study carried out by Khazaei et al. (2009) the results indicate factors such as making better plans, complying with educational discipline, using resources introduced by the ministry, and encouraging students to read books instead of booklets influenced the success of students in basic sciences (khazaei, Khazaei & Babaue, 2009).

The research results of Zahedi and Amir Maleki Tabrizi showed that the effectiveness of medical education on the curriculum was lower than the average level; however, it was as at the average level in the aspects of organizing teaching activities and educational interactions (Zahedi & Amirmaleki, 2008). The results of a study conducted on the reasons for the absenteeism of medical students in the basic sciences course indicate that faculty members' performance and educational problems had the greatest effects on student absenteeism (Nabavi & Safavi, 2012). Fine conducted a study in Danish universities. The research results of Fine showed that the diversity of basic sciences curricula in universities in Denmark. A number of universities integrated the basic sciences curriculum with clinical plan (Fiehn, 1998). The results of a study conducted in universities in the south of Europe indicate that the concepts of basic sciences match with clinical concepts more (Martinez-Alvarez, Sanz & Berthold, 2001). The research results of Alijanzadeh et al. showed that viewpoints' of student Qazvin University of Medical Sciences, in all dimensions of educational service quality (assurance, accountability, empathy, reliability, and tangibility), a negative quality gap existed. The negative gap indicates that the students' expectations were beyond the current condition, and fundamental interventions and proper planning must be done to fulfill the students' expectations (Alijanzadeh et al, 2018). The research results of Cetindag showed that the students' views on the necessity of basic medical sciences courses were insufficient and that the students didn't see themselves as sufficient in those courses to the desired level (Cetindag et al, 2018). The research results of Khalooei & Karbakhsh show that there were negative gaps in all dimensions of the quality of educational services in the Department of Community Medicine, which should be planned for quality improvement (Khalooei & Karbakhsh, 2018).

Given the above mentioned review, the main aim of this study was to evaluate the education of basic sciences in medicine disciplinary at the Islamic Azad University of Ardabil branch from student view based on the system model. Accordingly, the research questions are as follows:

- 1-How are the inputs of basic sciences education in medicine at the Islamic Azad University of Ardabil?
- 2- How are the processes of basic sciences education in medicine at the Islamic Azad University of Ardabil?
- 3- How are the outputs of basic sciences education in medicine at the Islamic Azad University of Ardabil?

Instruments and methodology

The research method in this research was descriptive study from survey. The statistical population included all the medical students studying at Ardabil Branch in 2015. There were 405 participants. The simple random sampling method and Krejcie and Morgan's table for sample size were employed to select 162 individuals. Then a researcher-made questionnaire in the Likert scale was used to collect data. The questionnaire was theoretically based on the model system including three components: input, process and output. In this study, the input components included student characteristics, facilities and equipment, and regulations. The process components were employee characteristics, group management, teaching, and learning. The output components were student satisfaction and attitude towards major, innovation and creativity, and student enhanced research spirit for the evaluation of the basic sciences course. These components were also regarded as the questionnaire foundation. The formal and content validity of the questionnaire were confirmed by the experts. To assessment the reliability of the questionnaire used Cronbach's alpha that was 0/961. Data were analyzed with SPSS 17. Based on research questions, different statistics such as frequency, percentage and mean were used. The results of data analysis were divided into three levels (high, medium, and low) to answer the research questions. In other words, the scores between 1 to 2/32 were considered low, and those between 2/33 to 3/65 were considered medium. Other scores between 3/66 to 5 were regarded as high. Then the sample was divided into three levels. Morally, all sample groups completed the questionnaire on a voluntary and they were assured of the confidentiality of individual characteristics.

Findings

There were 102 female participants (63%) and 60 male participants (37%). Regarding the place of birth, 95/1% (154 participants) were born in urban areas, 2/5% (4 participants) were born in rural areas, and 2/5% (4 participants) was born in tribal areas. Moreover, 48/6% (77 participants) were aged between 18 to 20, and 38/3% (62 participants) were aged between 21 to 23. Moreover, 8/7% (14 participants) were aged between 24 to 28 years old. In addition, 5/6% (9 participants) did not fill out the questionnaire.

Table 1. Input components of basic sciences education

Input Components		down	Average	top	total
Individual characteristics of students	frequency	۳	۴۳	۱۱۶	۱۶۲
	percent	۱/۹	۲۶/۵	۷۱/۶	۱۰۰
Facilities and Equipment	frequency	۸۶	۶۶	۱۰	۱۶۲
	percent	۵۳/۱	۴۰/۷	۶/۲	۱۰۰
Rules and Regulations	frequency	۳۹	۱۰۰	۲۳	۱۶۲
	percent	۲۴/۱	۶۱/۷	۱۴/۲	۱۰۰
Total input	frequency	۵۳	۹۲	۱۷	۱۶۲
	percent	۳۲/۷	۵۶/۸	۱۰/۵	۱۰۰

The data of this table indicate that 32/7% of people believe that the current status of inputs in the medicine curricula is low, and 56/8% of them believe that it is at the medium level. Furthermore, 10/5% of them evaluated the inputs at a high level.

Table 2. Process components of basic sciences education

Process Components		down	Average	top	total
Property of faculty	frequency	17	71	14	172
	percent	03/7	37/7	1/7	100
Property of Employees	frequency	44	10	38	172
	percent	27/2	49/4	23/0	100
How to manage Group	frequency	90	07	17	172
	percent	00/7	34/7	9/9	100
Teaching and learning process	frequency	23	110	29	172
	percent	4/2	77/9	17/9	100
total process	frequency	42	100	20	172
	percent	20/9	71/7	12/3	100

The data of this table indicate that 25/9% of people believe that the current status of processes in the medicine curricula is low, and 61/7% of them believe that it is at the medium level. Furthermore, 12/3% of them evaluated the processes at a high level.

Table 3. Output components of basic sciences education

Output Components		down	Average	top	total
Satisfaction of course	frequency	40	111	29	172
	percent	27/1	04/3	17/9	100
Attitude towards disciplinary	frequency	10	47	100	172
	percent	6/2	29/0	74/1	100
Creativity growth initiatives	frequency	02	73	47	172
	percent	32/1	38/9	29/0	100
Reinforcement of morale researcher	frequency	71	07	40	172
	percent	37/7	34/7	27/1	100
Total output	frequency	20	97	47	100
	percent	12/3	09/3	28/4	172

The data of this table indicate that 12/3% of people believe that the current status of outputs in the medicine curricula is low, and 59/3% of them believe that it is at the medium level. Furthermore, 28/4% of them evaluated the outputs at a high level.

Discussion

This study was conducted to evaluate basic sciences education of medicine disciplinary at the Islamic Azad University of Ardabil branch to present some solutions to improve the current status. The research findings indicate that the inputs, processes and outputs of the basic sciences course of medicine disciplinary were at a medium level viewpoint of students. The findings of the first question show that 32/7% of participants believe that the inputs of basic sciences are low, whereas 56/8% of them believe that they are at a medium level, and 10/5% of them believe that they are high.

Regarding the three input components of basic sciences, 1/9% of participants believe that the individual characteristics were low, and 26/5% of them stated that they were at a medium level, whereas 71/6% of them said that they were high. Regarding facilities and equipment, 53/1% of them stated that they were low, and 40/7% of them stated that they were at a medium level, whereas 6/2% of them said that they were high. Moreover, 24/1% of them evaluated regulations as low, and 61/7% of them believed that they were at a medium level, and 14/2% of them believed that they were high. The research results are consistent with the results of studies conducted by Bazazi, Fallahi and Yavari(2012) and Zahedi and Maleki Tabrizi(2008). These researchers concluded that the inputs of basic sciences education in medicine were at a high level in student view.

The findings on the second research question indicate that 25/9% of participants believe that the processes of basic sciences were low, and 61/7% believe that they were at a medium level, whereas 12/3% of them stated that they were high. The research results are consistent with the results of studies conducted by Naderi et al.(2011), and Zahedi and Maleki Tabrizi(2008) who showed that the current status of processes in basic sciences in medicine disciplinary was at a medium level.

Regarding the components of process, 53/7% of participants believed that faculty members were at a low level, and 37.7% of them stated that they were at a medium level, whereas 8/6% of them stated that they were high. Regarding employees, 27/2% of participants believed that they were at a low level, and 49.4% of stated that they were at a medium level, whereas 23/5% of them stated that they were high. Regarding group management, 55/6% of participants believe that they were low, and 34/6% of them stated that they were at a medium level, whereas 9/9% of them believed that they were high. Moreover, 14/2% of participants believed that teaching and learning were at a low level, and 67/9% of them stated that they were at a medium level, whereas 17/9% of them stated that they were high.

The findings on the third research question indicate that 12/3% of participants believed that the current status of basic sciences outputs was at a low level, and 59/3% of them were at a medium level, whereas 28/4% stated that they were high.

Regarding the four components of basic sciences output, 27/8% of participant's evaluated satisfaction with education as low, and 54.3% of them believed that it was at a medium level, whereas 17/9% of them stated that it was high. Regarding attitude towards the curriculum, 6/2% of participants believed that it was low, 29/0% believed that it was at a medium level, and 64/8% stated that it was high. Regarding innovation and creativity, 32/1% of participants stated that they were low, 38/9% of them believed that they were at a medium level, and 29/0% evaluated them as high. Moreover, 37/7% of participants believed that student enhanced research spirit was at a low level, and 34/6% believed that it was at a medium level, whereas 27/8% of them evaluated it as high. The research results are consistent with the results of a study conducted by Bazazi, Fallahi and Yavari(2012) who concluded that the outputs of basic sciences course of medicine were at a medium level. To explain the research findings, it can be stated that the outputs of medical schools are away from the desirable status, and it is necessary that collegiate managers provide the essential plans and infrastructures to provide the current status.

According to the research findings, the following solutions are suggested to improve the current status of basic sciences in medicine:

*The Recommended Solutions for Improving the Inputs of Basic Sciences Education:

Equipping the department of basic sciences with physical facilities (to train students appropriately at a high quality); research facilities; appropriate welfare facilities; considering spatial standards and university equipment at the time of student admission to make university student proportionate to the number of students; updating the resources and books of the medical school library; providing appropriate facilities for the library of the medical school; holding explanatory classes for students to make them aware of the bylaws and educational curricula.

*** The Recommended Solutions for Improving the Processes of Basic Sciences Education:**

Providing appropriate emotional, individual, educational and research services for students; designing a mechanism for faculty members to use electronic resources and specialized websites to improve the educational quality of basic sciences course; designing and holding in-service training classes for teachers and employees in scientific and collegiate environments; holding in-service training courses entitled modern teaching methods and learning evaluation methods for students in basic sciences.

***The Recommended Solutions for Improving the Outputs of Basic Sciences Education:**

Holding extracurricular classes with the orientation of improving and enhancing research spirit among students; holding extracurricular classes for students to train them in scientific research methods (qualitative, quantitative and mixed) and how to conduct scientific studies; holding extracurricular classes for students to deal with innovative and initiative methods.

In addition, the current study was conducted from the perspective of medical students studying basic sciences at the Islamic Azad University of Ardabil branch. The generalization of results to other universities and other collegiate institutes executing medicine across the country is limited because this study was only conducted on the basic sciences course of medicine at the Islamic Azad University of Ardabil branch. Other research limitation includes the self-reporting questionnaire used for data collection. It may influence student responses and make the research results biased.

Conclusion

Educational evaluation is a formal activity which is conducted to clarify the fulfillment of curricular goals, and judgment about educational activities. In general, the research results indicated that the educational status of basic sciences in medicine disciplinary was at a medium level at the Islamic Azad University of Ardabil branch. It is recommended that the medical faculty should evaluate its education systematically to improve the educational status. Therefore, it can codify and implement improvement plans based on the evaluation results.

References

- Benjamin R, Klein S. (2006). Assessment versus Accountability in Higher Education: Notes for Reconciliation. United Nations Educational, Scientific and Cultural Organization (UNESCO) Commissioned Paper Series, 1-26.
- Hosseini R, Bazargan A. (2009). Goals in Interdisciplinary Sciences and the Role of Goals in Universities' Quality Assessment. *Journal of interdisciplinary in the humanities*, 1(4):123-145. Persian DOI: 10.7508/ISIH.2009.04.005.
- Wood W.B. Innovations in teaching undergraduate biology and why we need them. *Annu Rev Cell Dev.* 2009; 25: 93-112.
- Parylo, O. (2012). Evaluation of educational administration: A decade review of research (2001–2010). *Studies in Educational Evaluation*, 38: 73-83. <http://dx.doi.org/10.1016/j.stueduc.2012.06.002>.
- Ministry of health and medical education. (2009). The basic standard of public medicine course, secretariat of medical education council, Ministry of health and medical education. [Persian].
- Khaloeei A, Karbakhsh A. (2018). The Quality of Educational Services for Internship and Apprenticeship Courses at the Community Medicine Department of Kerman University of Medical Sciences, from the Trainees' View Point. *Strides in Development of Medical Education*, 15(1):e57542. Doi: 10.5812/sdme.57542.
- Ahmadi M, Freydoni L. (2018). New Thinking on the Quality of Training and the presentation of a Paradigmatic Model (Case Study: Technical and Vocational Organization). *Educational Strategy Medical Science*, 11 (4):63-70. Doi: 10.29252/edcbmj.11.04.08. [Persian].

Tayebi Abolhasani A. H, Koosha H. R. (2016). Performance evaluation using data envelopment analysis and Topsis (Case: Mashhad Municipality's Youth Consultants Group. *organizational culture management*, 14(3): 909-936. Doi:10.22059/jomc.2016.58895. [Persian].

Ghasemi M, Fardanesh H, Hatami J, Ahmady S. (2018). Evaluation of the Electronic Learning System of Medical Education (Case Study of Shahid Beheshti Medical School. *Education Strategies Medical Sciences*, 11 (4):39-52. Doi: 10.29252/edcbmj.11.04.06

Mazloomi Mahmoudabad S S, Moradi L. (2018). Evaluation of Externship curriculum for public health Course in Yazd University of Medical Sciences using CIPP model. *Education Strategies Medical Sciences*, 11 (3):28-36. Doi:10.29252/edcbmj.11.03.04.

Porsafar A. (2007). The evaluation of higher education system quality with systematic approach. *Proceedings of the Regional Conference on the components of quality in higher education, Islamic azad university Roodhen branch*. [Persian].

Spooren P, Dimitri Mortelmans D, Christiaens W. (2014). Assessing the validity and reliability of a quickscan for student's evaluation of teaching Results from confirmatory factor analysis and G Theory. *Studies in Educational Evaluation*, 43:88–94. <http://dx.doi.org/10.1016/j.stueduc.2014.03.001>.

Kember D, Leung D. Y. P, Kwan, K. P. (2002). Does the use of student feedback questionnaires improve the overall quality of teaching? *Journal Assessment & Evaluation in Higher Education*, 27(5): 411-425. <http://dx.doi.org/10.1080/0260293022000009294>.

Nielsena T, Kreinerb S. (2017). Course evaluation for the purpose of development: What can learning styles contribute? *Studies in Educational Evaluation*, 54:58-70. <http://dx.doi.org/10.1016/j.stueduc.2016.10.004>.

Amiri J, Seif-Rabiei MA, Maghsudi F, Khatami F, Sanaei Z. (2018). Evaluation of the Reform Program at the Basic Medical Sciences Level from Professors and Medical Students' viewpoints in Hamadan University of Medical Sciences. *Research in Medical Education*, 10 (2):58-67. Doi: 10.29252/rme.10.2.58

Mojtahedzade R, Mohammadi A, karimi A. (2008). Educational ranking of medical schools of Iran: A strategy for identification of strengths and weaknesses. *Hakim Research Journal*, 10(3):36-42. [Persian].

Naderi N, Abedini S, Asgari N, Hosseini Tashnizi S, Jahangiri Zarkani Z, Namazi S. Sh. (2011). Assessment of education quality of basic sciences based on medical students' perspective. *Hormozgan Medical Journal*, 14(3):207-213. [Persian].

Khazaei Z, Khazaei T, Babaue M. (2009). Survey the medical student's educational process at Birjand medical sciences university in basic sciences. *Quarterly of Strides in Development of Medical Education*, 5(1):148-151. [Persian].

Zahedi M, Amiraleki Tabriz H. (2008). Medical educational effectiveness from viewpoint of medical students at Tehran medical sciences university. *Iranian Journal of Medical Education*, 7(2):289-298. [Persian].

Nabavi S J, Safavi M. (2012). Survey the cause of absence and oversight to lesson basic sciences medical disciplinary students at Islamic azad university Tehran branch. *Medical sciences journal of Islamic Azad University*, 2(3):227-232. [Persian].

Fiehn NE. (1998). The basic science teaching experience in the Nordic countries. *European Journal Dent Education*, 2(3): 115-123.

Martinez-Alvarez C, Sanz M, Berthold P. (2001). Basic science education in the dental curriculum in southern Europe. *European Journal Dent Education*, 5(2): 63-66.

Alijanzadeh M, Fattahi H, Veisi F, Alizadeh B, Khedmatgozar Z. (2018). Assessment of Educational Service Quality Gap: The Students' Perspectives. *Educational Research in Medical Sciences*, 7(1):e80246. Doi: 10.5812/erms.80246.

Cetindag A, Taskin Yilmaz F, Vicil S, Basli M, Ahmet Arslan S. (2018). Views of Nursing Students on Basic Medical Sciences Courses. *Educational Research in Medical Sciences*, 7(1):e80220. Doi: 10.5812/erms.80220.

Bazazi N, Fallahi Niagh, Yavari Kia A, Houshmand B. (2012). Medical Students' Viewpoints about the Quality of Education in Outpatient Clinics in Hamedan University of Medical Sciences in 2007. *Iranian journal of education in medical sciences*, 11(2):167-173. [Persian].