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ABSTRACT
Educational evaluation is one of the essential components of the education system and the use of its results about the effectiveness of teaching, the teaching materials and methods is important and helps to improve it. Evaluation especially for medical students who deal with the public health is of particular importance.

Method: The data used in this study consists of 19 period of the information transmitted by the Center for the Evaluation of Medical Education of the Health Ministry that usually is sent to the universities. In these tests the acceptance quorum is based on the scores of the participant students themselves.

Results: Results show that the mean scores of the March tests are significantly higher than the September tests and the acceptance quorum from the year 2007 became lesser and the percentage of individuals who have answered the questions (more than 60%) from the year 2007 was strongly decreased.

Keywords: comprehensive test of the medical basic sciences, the approved and selected acceptance quorum, medicine students, medical faculty of Zahedan

INTRODUCTION
The evaluation of a systematic process and necessary components and at the same time most controversial educational issues. The use of evaluation results is useful
not only for judging the learners’ performance but also to judge the effectiveness of teaching and learning methods and materials. On the other hand, improving the performance of quality of university depends on the improvement of quality in education. And one of the main components of the education is students and evaluation of medical students is essential and the comprehensive tests of Basic Sciences and the medical internship are the most important evaluations of medical students that is done nationwide and passing it provide the possibility of continuing study for medical students. While evaluation helps to correct weaknesses and enhance strengths and to improve the education system quality, it makes also the system responsible (1) and by this method it distinguishes the efficient and inefficient groups. In different studies has been referred to efficient factors in students’ successfulness at the a comprehensive test of Basic Sciences, including: Diploma average, age, marital status, Basic Sciences course period, the score average of Basic Sciences course, quota, sex, education possibilities, the residence in dormitory, study guidance and counseling, physical and social environment of the classroom, the students’ motivation and interest and students’ economic status and welfare and so on. (2,3,4,5,6,7) In addition to the above cases Namdari’s findings (8) indicates that the other educational multiple factors, including: The amount of unit headlines, the term end score of each unit, readiness to the test, the time devoted to the test readiness, the importance of teaching the unit in the basic sciences level, the teaching quality of lecturer, the interest to the unit, the amount of unit importance of a comprehensive test and finally the lecturer’s use of audio-visual and laboratory equipment can influence the comprehensive test results. Shafie’s study in Isfahan (9) and Javadi’s (10) one in Qazvin show that even how and when of providing units can influence the comprehensive test results. Therefore, for the success of students in the comprehensive test of Basic Sciences in addition to individual and family factors of students it should consider the education system of universities. On the other hand Kues’s and Larkin studies (11) show that there is a significant relationship between the Initial progress and final progress. Therefore the success of medical students in the later stages has relation with their success in the initial tests, including comprehensive test of Basic Sciences. This study was conducted in the aim of investigating the educational condition of the medical students of Zahedan of the Basic Sciences level based on the
comprehensive test results of Basic Sciences in the decade 2001-2011, in order that by analyzing comprehensive test of results of basic science can achieve a more exact evaluation and understanding education of the medical students in this leveland finally by enhance the strengths and improving weaknesses make more dynamic the system.

**METHODOLOGY**

This research is a descriptive – level based study. Data collection tools, the September and March test results during the years 2001 - 2011 include 19 courses transmitted from the Evaluation center of country Medical education affiliated to the Ministry of Health, treatment and Medical Education. In this test 210 questions with an equal value of different units according to the number of units is proposed and the acceptance quorum in this test is 70% of scores average of 5% of students with the highest scores from all over the country (the selected quorum) although every year the ministry approves a quorum for each test (the approved quorum) but never it has been implemented. Using the Software 15 SPSS the data have been analyzed, in this study, the factors including: The score average of students, in the acceptance number and percentage of students in the total September and March separately, a score minimum of 2.5% of top students, the acceptance average 60% of students in the different tests, the ranks average, the rank average of the maximums, the selected quorum based on 70% of scores average 5% of students with the highest scores, the approved quorum of ministry and the comparison of the above factors before and after 2007 during the decade 2001-2011, and also the comparison of the scores average of students in Zahedan with the average of country student in the period of 2004 to 2008 have been investigated.

**RESULTS**

The score average of student of Zahedan during the decade 2001-2011 was 112.89 ±12.59 (n = 502) that in September tests became 105.66 ± 10.96 (n = 89) and in the March tests 119.40± 10.54 (n = 413) and the difference in level P < 0.01 is significant. In this decade the average of the acceptance quorum resulted from 75% of scores 5% of the most successful medical students of country in the comprehensive test of basic sciences of that course (the selected quorum) was 89.72± 7.24 and the selected acceptance quorum in the comprehensive test since 2007 in all the years was less than this average and it shows the decline. The percentage of acceptance and or so-called the transition rate in the comprehensive tests of basic sciences during the decade 2001-2011 based on the
selected quorum of Zahedan university students was 87.24± 99.50 (n = 449) that its rang has oscillated from 74.07% in March 2002 to 100% in September 2008 and this percentage in the March tests was 89.66± 8.51% (n = 373) and in September %84.55± 10.3(n = 67) that this difference is not significant (P =0.25). The average of the approved quorum of ministry in this decade was 101.56± 4.91 that this average in March was 105.55 ± 3.02 and in September 97.55 ± 2.24 that this difference with (P=000) is significant,according to the approved quorum the percentage of acceptance in this decade was 76.79± 19.02 (n = 391) and this percentage in March was 80.46± 15.48 (n = 324) and in September 73.13± 22.33(67) that this difference with P = 0.03 is significant (Table 1). The percentage of acceptance based on the selected quorum and the approved quorum of ministry before September 2007 in these years is similar although their quorums and average have trivial differences. However, the percentage of acceptance based on quorum resulting from the scores of students and the approved quorum of Ministry after September 2007 are strongly different and this difference is significant, So that percentage acceptance according to the approved quorum of Ministry after September 2007 was 62.65± 22.46 (n = 117) and the percentage of acceptance in terms of the selected quorum after September 2007 amounts to 89.22 ± 10.27 (n = 175) that this difference with( P =0.01) is significant (Table 2). The average of score of 2.5 percent of top students of Faculty before (2007) was 172.72 ± 3.02 and after (2007) 160.0 ± 6.04 that this difference also is significant (P =000). The average of percentage of individuals that achieved the test score higher than 60%, before 2007 was 35.52 ± 25.73% (n = 143) and after (2007) 7.42 ± 7.40% (n = 22) that this difference is also significant (P <0.002). The rank average of Faculty resulting from scores of students compared to other faculties before (2007) was 25.75 ± 9.06 and after 2007 has been changed to 29.5 ± 9.08 that this difference is not significant (P = 0.432). Average of maximum scores that the students have achieved in various tests before 2007 was 151.33 ± 21.39 and this maximum after 2007 has declined and amounted to 133.33 ± 16.77, although this difference is not significant (P =0.09).

<table>
<thead>
<tr>
<th>Table 1, the education parameters of students of the Medical faculty of Zahedan in decade 2001- 2011</th>
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<tr>
<td>Score average of students</td>
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### Table 2: The education parameters of students of the Medical Faculty of Zahedan before and after 2007

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Before 2007</th>
<th>After 2007</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average of the selected quorum</td>
<td>89.72±7.24</td>
<td>86.22 ± 5.67</td>
<td>P &lt; 0.03</td>
</tr>
<tr>
<td>The percentage of acceptance with the selected quorum</td>
<td>87.24±9.5</td>
<td>55.8±10.3</td>
<td>P &lt; 0.25</td>
</tr>
<tr>
<td>Average of the approved quorum</td>
<td>101.56±3.9</td>
<td>97.5±2.24</td>
<td>P = 0.00</td>
</tr>
<tr>
<td>The percentage of acceptance with the approved quorum</td>
<td>76.7±19.02</td>
<td>73.13±22.33</td>
<td>P &lt; 0.03</td>
</tr>
<tr>
<td>The score average of country in 2004-2008</td>
<td>121.3±8.55</td>
<td>Score average of Zahedan in 2004 - 2008 (247) 116.10±13</td>
<td>P = 0.323</td>
</tr>
</tbody>
</table>

**CONCLUSION**

These results indicate that by declining the acceptance quorum resulting from 70% of the score of 5% from the scores of the top students of all universities participating in the test, Basic Sciences education in all universities of the country have been exposed to the decline and this decline especially since 2007 has been dramatic. This may be caused by the quantitative spread of universities without due attention to the present capabilities of universities, slighting the education, pushing scientific groups towards research, students’ unawareness of the importance of Basic Sciences level.

Following the trend established in recent years the President of the Center for the Evaluation of Medical Education announces in October 2012 that the condition of the candidates of the comprehensive test of Medical Basic Sciences is anxious and also more anxious is the condition of candidates of the dentistry Basic Sciences comprehensive test and it must be started a transformation in education. (Modares Iran website 27)

**REFERENCE**


4- Zarei A, Shamseddini AR, Taghizadeh J. Study links high school GPA, specialized courses and comprehensive exam scores of students in basic medical sciences. Tehran 9th National Conference on Medical Education, 2007. [In Persian]


8- Namdari P. Study of effective factors on comprehensive test of basic medical sciences of the medical students of Lorestan University of medical sciences. Yafteh. 2009; 11 (3): 5-12.

9- SHafiei F, Moradi A, Forozandeh MH, Asghar Foroghi A, Mojtaba Akbari M. Evaluation and comparison the results comprehensive Exam and the mean score of Basic sciences courses of Isfahan medical students before and after the changes of basic science courses. Iranian Journal of Medical Education. 2010; 10 (5): 1177-1187. [In Persian]


12- Khazaei Z, Khazaei K, Babai M. Studying progress of medical students of Birjand
University of Medical Sciences at basic science level. Journal of Developmental Steps of Medical Education. 2008; 5 (1): 148-51 [Persian].


15- Wichian SN, Wongwanich S, & Bowarnkitiwong S. Factors Affecting research Productivity of Faculty Members in Government Universities : Lisrel and Neural network Analyses. Kasetsart Journal. 2009. 67-

16-Asayesh H, ghorbani M, safari R, borghaei A, rezapour A, mansoorian M et al. Effective factors on educational and research activities of the teachers in Golestan University of Medical Sciences. Iranian Journal of Medical Education.2011; 11 (3) :294-295


21-Custers EJ, Cate OT. Medical students’ attitudes towards and perception of the basic science: a comparison between students in the old and the new curriculum at the University Medical Center Utrecht, The Netherlands. Med Educ 2002 Dec; 36(12): 1142-50
22-Hassanzadeh G, Alipour HM, Hoseini TA, Noori H. Attitudes of medical students at clinical section of Bandar Abbas Medical University toward the education and development. 2006; 1:10-4. [In Persian]


24-Mohammady N, Ziyaieha M, Golami A, Mozhdahi H yakhchaliha P. Predictive validity Comprehensive Test of Basic Sciences In explaining academic performance of students of Qazvin University of Medical Sciences. Bulletin14th Congress of medical education. Iran University of Medical Science P: 496

25-Abbasi A, Bijary B. Relationship between basic sciences and pre-internship exam results students with a GPA of Birjand University of Medical Sciences. Bulletin14th Congress of medical education. Iran University of Medical Science P: 570

26-www. Iranmodares.com/news-index.ID=1736