A SURVEY OF THE EDUCATIONAL STATUS OF THE BASIC SCIENCES LEVEL OF MEDICAL FACULTY OF ZAHEDAN BASED ON THE RESULTS OF COMPREHENSIVE TESTS OF THE MEDICAL BASIC SCIENCES AT THE YEARS 2001-2011

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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 includes the collection and interpretation and analysis of data and is one of the essential 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 essentialand the comprehensive tests of Basic Sciences and the medical internship are the most important evaluations of medical students thatis done nationwideand 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 include19 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 $\pm$12.59 (n = 502) that in September tests became 105.66 $\pm$ 10.96 (n = 89) and in the March tests 119.40$\pm$ 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$\pm$ 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 2007are 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). Theaverage 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 1, the education parameters of students of the Medical faculty of Zahedan in decade 2001- 2011

	Total tests of 2001 -2011	September tests	March tests	P- Value of September and march tests
Score avreage of students	112.89 ±12.59 **(502)**	**105.6** ± 10.9 (89)	**(413)** 119.40± 10.5	**P** < 0.013

Average of the selected quorum	89.72±7.24	86.22 ± 5.67	93.22 ± 7.12	**P < 0.03**
The percentage of acceptance with the selected quorum	(449) 87.24±9.5	**(76)** 55.84± 10.30	**(373)** 89.66±8.51	**P <0.25**
Average of the approved quorum	101.56±4.91	97.55± 2.24	105.55± 3.02	**P =000**
The percentage of acceptance with the approved quorum	76.79±19.02 **(391)**	**(67)** 73.13 ± 22.33	**(324)** 80.46±15.4	**P <0.03**
The score average of country in 2004-2008	121 . 30± 8.55	**Score average of Zahedan in 2004 - 2008**	**(247)** 116. 10 ± 13	**P=0. 323**

Table 2: the education parameters of students of the Medical faculty of Zahedan before and after 2007

	Before 2007	After2007	P- Value
Average of the selected quorum	93.54±6.0	83.71± 19.4	**P<0. 002**
percentage of acceptance on the basis of the selected and approved quorum	274) 85.79 ± 9.11 (		
percentage of acceptance on the basis of the approved quorum		62.65 ± 22 (117)	**P<0. 01**
percentage of acceptance on the basis of the selected quorum		(176) 89.22±10	
Score avreage of students	119.18±**11.3**	104.25± 8.8	**P< 0.007**
score average 2.5% top students of Faculty	172.72± 3.02	160.0± 6.04	**P =000**
The percentage of students with scores above 60%	(143) 53.35±25.73	(22) 7 42± 7.40	**P<0. 002**

CONCLUSION

These results indicate thatby declining the acceptance quorum resulting from 70% of the score of 5% from the scores of the top students of all universitiesparticipating in the test, Basic Sciences education in all universities of the country have been exposed to the declineand 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 thePresident 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)

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