Original Article

Determining the quality of educational services of university of Hamedan

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ABSTRACT

Background and Aim: Higher Education system as a dynamic system has two dimensions of quantity and quantity and its sustainable development requires harmonized growth of both qualitative and quantitative dimensions in parallel with each other. The present study is conducted by examining the gap between students' perceptions and expectations in Medical Sciences and Health Services University of Hamedan by using SERVQUAL model in 2016. Material and Method: The present study is a descriptive and cross-sectional study. Statistical population of this study consists of all the students of Medical Sciences and Health Services University of Hamedan in medicine.152 out of 260 students were selected based on Morgan's table and by using simple random sampling method. Data analysis was performed by using descriptive statistics and through SPSS 23.0. Results: The current situation of the quality of educational services in Hamedan University of medical sciences is satisfactory from the perspective of students; however, there is a quality gap in all five dimensions of services and all the indicators related to each dimension. The largest gap was observed in the dimension of assurance (-1.41) which is followed by the dimensions of empathy (-1.03), responsiveness (-0.91), confidence (-0.87) and tangibles (-0.79). The difference observed in the quality gap in various dimension of educational services is significant statistically. Secondary research hypothesis analysis from the perspective indicated that the dimension of assurance had the highest level of importance (4.50) and the dimension of responsiveness had the lowest level of importance and also priority (4.38). Conclusions: The ranking and the level of importance of the five dimensions of educational services was not the same from the perspective of students. Hence, it is necessary to consider these differences in quality improvement and resource allocation programs, in a way that the performance of services would be improved, especially in those dimensions that are deemed as more important by students.

Keywords: Satisfaction, quality, educational services, SERVQUAL

Introduction

Today, the topic of service quality is a very importance factor for growth, success and survival of organizations. At the global level, students' view regarding all the dimensions of educations provided in educational institutions is considered as a necessary factor for monitoring quality in universities and services quality have been introduced as a very important factor for superiority in induction in universities [1-4]. Higher education institutions have a greater emphasis on satisfying students' needs and expectations [5-7].

Students, employees and instructors (academic staffs) are the main customers of higher education, and the main step for identifying customers' perceptions and expectations regarding educational services quality, to determine the strengths and weaknesses and following that to adopt appropriate strategies for reducing this gap and to satisfying students' views [8].

Parasuraman and colleagues have developed SERVQUAL model for measuring service quality. This model evaluates students' perceptions and expectations from service quality in five following dimensions such as reliability, responsiveness, empathy confidence intangibility. In SERVQUAL model, respondents should use definitive values for expressing his/her perceptional and Subjective feelings. However, due to the subjective and intangible nature of the concept of quality, they are not able to express their views by using a definitive value about a matter [9-11]. Hence, the present study sought to determine the quality of educational services in Faculty of Medical Sciences and Health Services of Hamadan by using SERVQUAL model and its satisfactory status from students' point of view and determining its gap.

Material and Method

This study is a descriptive and cross-sectional type. Its aim was to determine the current situation of educational services in Hamedan University of Medical Sciences and also to determine the distance between the desirable status and present situation

from the perspective of students and the gap between it. Statistical population of the present study included all the undergraduate and graduate medical students of Hamedan University of Medical Sciences. Simple random sampling method was used in this study for sampling. It means that all of them had an equal chance of being selected. Using Morgan's table and considering the number of statistical population which is calculated as 260 persons 152 students were determined as sample size. The inclusion criteria consisted of having at least completed one semester. Data were collected through a SERVQUAL questionnaire and its validity was confirmed through previous studies [9-11].

Data analysis

Data analysis was conducted by using descriptive statistics by SPSS 23.0. In descriptive section, first, general profile of the sample individuals with frequency table together with statistical diagram is described. For questions related to each variable, frequency distribution tables are presented which include frequency of answers related to each question together with mean and standard deviation values. Using Kolmogorov-Smirnov normality assumption of samples was tested in inferential statistics section. Non-parametric test of Friedman's was used by considering the non-normality of variables' distribution, in order to ranking the dimensions of educational services quality. Then, the difference between the current situation and the desired one and the gap between these two statuses were determined for each variable.

Results

After collecting data, it was observed that 63 persons (41.4%) of the respondents were males and the rest of them (89 persons, 58.6%) were females. 36 persons (23.7%), 69 persons (45.4%) and 47 persons (30.9%) studied less than 2 semesters, $2-4$ semesters and more than 4 semesters respectively in this university. For testing normality or non-normality of variables data distribution, Kolmogorov-Smirnov test was used (Table 1).

Table 1: Kolmogorov-Smirnov test

Variable	Quantity	Mean	Test value	Sig. level (sig)
Tangibles	152	3.63	0.211	0.000
Responsiveness	152	3.47	0.151	0.000
Assurance	152	3.60	0.148	0.000
Empathy	152	3.39	0.116	0.000
Assurance	152	3.11	0.130	0.000
Quality of educational services (current situation)	152	3.45	0.157	0.000
Quality of educational services (satisfactory status)	152	4.44	0.165	0.000

Friedman non-parametric test indicated that the assumption of similarity of priority of five dimensions in the quality of educational services was not accepted (Table 2).

Table 2: Ranking of variables

Variables	Average of ranks
Tangibles	3.62
Responsiveness	3.47
Confidence	3.60
Empathy	3.39
Assurance	3.11

Table2 presents the average ranks of each variable. In this table, the variables of "tangibles and confidence" had the highest rank among the five dimensions of quality of educational services in Hamedan University of Medical Sciences, because. On the other hand, the variable of "assurance" had the lowest rank.

Table 3: Descriptive statistics of the quality dimensions of educational services (current situation)

Variable	Mean	Standard deviation	Skewness	Kortosis	Median	Mode	Min.	Max.
Quality of educational services	3.45	0.686	-0.559	-0.081	3.58	3.55	1.69	4.59
Tangibles	3.63	0.818	-1.150	1.597	3.83	3.83	1.17	5.00
Responsiveness	3.47	0.628	-0.139	1.522	3.60	3.60	2.00	5.00
Confidence	3.60	0.913	-0.495	-0.763	3.71	3.57	1.57	5.00
Empathy	3.39	0.817	-0.657	0.643	3.40	2.80	1.00	4.80
Assurance	3.11	0.869	-0.261	-0.735	3.33	3.50	1.50	4.67

From respondents viewpoints, the level of the quality of educational services (current situation), indicates the average level which, in turn, showed students' satisfaction of current situation of the quality of educational services in Hamedan University Of Medical Sciences. Therefore, hypothesis one is confirmed (Table 3).

Table 4: Descriptive statistics of the dimensions of the quality of educational services (satisfactory status)

Variable	Mean	Standard deviation	Skewness	Kortosis	Median	Mode	Min.	Max.
Quality of educational services	4.44	0.568	-2.065	5.731	4.58	5.00	2.00	5.00
Tangibles	4.42	0.570	-2.065	5.503	4.50	4.50	2.00	5.00
Responsiveness	4.38	0.619	-1.465	2.873	4.60	5.00	2.00	5.00
Confidence	4.47	0.575	-2.107	5.760	4.57	4.86	2.00	5.00
Empathy	4.42	0.568	-2.060	5.575	4.60	4.80	2.00	5.00
Assurance	4.50	0.617	-1.849	4.266	4.66	5.00	2.00	5.00

The average score of current situation and satisfactory status were 3.45 and 4.44, respectively which indicates that there was a significant difference between the satisfactory status and current situation related to the quality of educational services in Hamedan University of Medical Sciences. As a result, Considering the significance level of the test, which is smaller than 0.05, H0 is rejected and H1 is confirmed (Table 4).

Table 5: Descriptive statistics of the average gap in the dimensions of quality of educational services

Variable	Mean of current situation	Mean of satisfactory status	Gap
Quality of educational services	3.45	4.44	-0.99
Tangibles	3.63	4.42	-0.79
Responsiveness	3.47	4.38	-0.91

Confidence	3.60	4.47	-0.87
Empathy	3.39	4.42	-1.03
Assurance	3.11	4.50	-1.41

As shown in Table 4. Students' perception of the quality of education services was, approximately more than three and therefore, it can be said that from the students' point of view, quality of educational services had an average status.

Discussion

Results of studying this hypothesis indicated that there is a significant differece between the average score of current situation (3.45) and satisfactory status (4.440) of the quality of educational services. Considering the significance level of the test, which (p<0.05). H1 is confirmed, which indicates that there is a considerable and significant difference between the satisfactory status of the quality of educational services and current situation of the quality of educational services in Medical Sciences and Hamedan University of medical sciences. The finding of the study is, consistent with finding of other studies [12-16]. They supposed that there are a difference between the students' expectations and perceptions in term of integrity. Gilavand et al has shown that the students have relative satisfaction from the present situation of the quality of in-service educational services, but there is a large gap to achieve ideal condition and complete satisfaction of them [13]. Considering that in hypothesis 1, the level of the quality of educational services from the perspective of respondents (current situation) shows an "average" level and in hypothesis 2, the level of the quality of educational services from the perspective of respondents (satisfactory status) shows a "high" level and that both hypotheses considering their average score have been reported at a desirable or satisfactory level, hence, it can be concluded that the level of this satisfaction and importance has a different degree. Najafi et al. (2014) also in their study regarding the evaluation of the quality of educational services based on SERVQUAL model have shown that students' perception of the quality of education services in social and behavioral sciences universities is approximately equal to three and therefore, it can be said that from the students' point of view, quality of educational services has an average status [16].

As it was observed in this study, based on the students' perspective, there is a quality gap between all the five dimensions and all the variables related to each dimension. The highest gap was seen in the dimension of assurance (-1.41), following with the dimensions of Empathy (-1.03), responsiveness (-0.91), confidence (-0.87) and tangibles (-0.79). It was also found that the observed differences between the quality gaps in the various dimensions of educational services are significant statistically.

Kebriaee & Roodbari (2008) also have compared the importance of the five dimensions of educational services from the perspective of students and academic faculty members of Medical Sciences University of Zahedan and have found that the rank and importance of these five dimensions are not the same and similar between these students and faculty members [17]. Also these findings are consistent with the findings of Yousapronpaiboon which in their study with the title of "Measuring higher education service quality in Thailand" have found that there is a significant difference between the students' perceptions and expectations in all the five dimensions [18].

In secondary research hypothesis analysis indicating the level of satisfactory status of the quality of educational services from the students' perspective, it was revealed that the dimension of assurance has the highest level of importance (4.50) and the dimension of responsiveness has the lowest level of importance and priority (4.38). Hence, in programs for quality improvement and resource allocations, these differences should be considered, in a way that service performance, especially, in the dimension of assurance (ability of employees to communicate a sense of trust and confidence to students regarding the university) should be improved. Improving the communicative skills of student satisfaction emphasized in other study such as study of bazrafkan and et al [19, 20].

In spite of the fact that students are rather satisfied with current situation for the quality of the university services; however, still there is a long way to achievement of the ideal status and gaining full satisfaction of students as the major users of university services and the process of providing the promised services correctly and reliably (assurance), paying sympathetic and unique attention to students (Empathy) and university enthusiasm to help students and providing services promptly (responsiveness) should be still improved.

Conclusion

Considering the studies conducted in this field and also the findings of the present study, it was revealed that there is a negative quality gap in all the five dimension of educational services. According to this, students' expectations are beyond their perception of the current situation and in all the dimensions of educational services provision, some kind of shortcomings are seen which indicates to the necessity of planning toward reducing or removing these shortcomings. Hence, it is necessary to conduct a survey on students with the help of this university every year for gaining more awareness regarding students' educational needs, in order to identify the shortcomings and take necessary measures for solving them as soon as possible.

The rank and importance of the five dimensions of educational services in students' perspectives as well as the members of the faculty are not the same. This makes them to pay more attention to those dimensions that are deemed as less important by students and hence, to damage the quality of services in the perspective of student. Hence, it is necessary to consider these differences in programs for improving quality and resource allocations, in order to improve service performance, specially, in those dimensions that are deemed more important by students. It is recommended to place more importance on students' experiences and views regarding the quality of educational services, in order to be able to create a competitive atmosphere in university and affect attracting more students.

Competing interests:
The authors declare that there is no conflict of interests.

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