Performance and Teaching Methods of Oral Medicine and Clinical History Reporting In Syrian Private University

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Abstract: Patient file (or oral medicine sheet) is considered an important instrument that helps dentists diagnose the remedial case in order to reach the best results in their work. Hence, this study aims to evaluate each teaching process and patient file (or oral medicine sheet) used in the Syrian Private University's dentistry faculty based on opinions of those using this sheet (fifth year students).

The results show that students observe that the oral medicine sheet takes long time to be filled in, and it is not strongly correlated to the theoretical study of the student. In addition, it does not help the good diagnosis of the remedial case of the patient either. Despite of supervisors help, filling in the patient file still seems to be relatively difficult.

In conclusion, this important instrument should be more effective, in design and content, in order to meet students' needs in making good diagnosis.

***Key words:** dentistry students, diagnosis, oral medicine sheet, statistical analysis, teaching.*

1. Introduction:

The recent development of science has led to a simple technology that facilitated the work of doctors in general and dentists in particular. This resulted in updated methods and tools of education, in order to create a new generation of doctors able to deal well with the modern technological variables. This created the need to develop new educational methods followed in universities, specifically in the newly opened private universities, such as the Syrian private university, which supports the distinguish of this university compared to others. Employment of scientific knowledge directly in real life is required nowadays, so it is very important, for dentistry students' case, that the scientific content of the various materials fit the clinical side leading to dentistry students understanding of various medical situations they might face. Thus reaching to practical and logical analysis to develop appropriate treatment plan and apply it to get the desired results is the main objective of this study.

Due to the organization and performance of work in oral medicine sections in Syrian universities linked to a set of standards that integrate the theoretical side, and increase the effectiveness of the teaching process, it was necessary to propose a modern mechanism pushing the process of teaching in these universities, and making a jump on the practical level and theoretical level as well, leading to the development and improvement of performance.

Medical literature includes various studies, designed to evaluate the teaching methods followed by teachers of Dentistry, for the delivery of medical information, and its application by the students of various years. Some academic tools are also identified to evaluate effective teaching mechanisms in this field [1]. In 2001, some researchers studied and evaluated the clinical application values of dentistry students, through a sample of teachers in restorative dentistry depending on a questionnaire designed specifically for this purpose [2]. Clinical teaching in the literature was considered essential and central in the teaching of Dentistry [3]. This is why teaching methods of dentistry was distinguished from human medicine sections, where great importance is given to the manual skills and techniques of a dentist in his work. Here comes the role of specialized teachers and supervisors [4,5].

Accordingly, Knowledge of the various factors affecting the teaching methods is the key factor in the improvement and development of these methods by taking advantage of the professors' experience and the observations of the student. The Oral Medicine sheet is considered one of the most important tools that helps the dentist in good

diagnosis of pathological condition. The sheet content includes what a doctor needs without useless elaboration, or severe shortcut that makes it ineffective in helping the student and the dentist to achieve the best results in their work. Thus, this study aims to assess each of the teaching processes and the oral medicine sheet applied in the Faculty of Dentistry at the Syrian Private University.

Therefore, we can formulate the aim of this research as follows: Since there is not yet an objective way to evaluate the work of teachers and supervisors in Oral Medicine and clinical history course, this work emphasizes the aspects and disadvantages of current teaching methods and discussing it in terms of methodology, objectivity and reliability. In addition, it looks at the good drafting of an academic way that is clear in the clinical application of the Oral Medicine course and that of clinical history.

Thus, this study aims to evaluate the Oral Medicine sheet based on a set of criteria, including: the difficulty that students face when filling out Oral Medicine sheet, how the students evaluate the time needed to fill in the sheet, decide if the sheet includes the needed information to make a good diagnosis of the patient's condition and if the sheet is linked to what student had learned, find out whether supervisors assist the students well, and finally how oral Medicine students assess sheets in total.

2. Materials and Methods

This research adopted a descriptive and analytical approach. Having described the search variables, the research hypothesis were tested based on a set of appropriate statistical tests for each of them and for the aim of the test. This was done based on data collected in a comprehensive survey manner using a questionnaire designed for this purpose which takes into account the teaching mechanism used previously at the Faculty of Dentistry at the Syrian private University. The evaluation included the qualities of the Oral Medicine sheet as well as a number of criteria that relate to how important the information gained by the student through the theoretical section, and their effectiveness in practical application while examining the patient, and the ability to know various oral lesions diagnosis, leading to appropriate treatment plan.

Data was collected in the comprehensive survey manner for all fifth-year students enrolled in the course of Oral Medicine at the Faculty of Dentistry, who follow patients attending the Faculty clinics. A questionnaire was distributed to all fifth-year students and 45 sheets, which were valid for the study, were retrieved. Prior to the distribution of the questionnaire, all students were subjected to a common guide session to explain how to use Oral Medicine sheet and questionnaire, and the study was then calibrated. Patients were not informed of this study because their own information was not collected, despite the possibility of the use of Oral Medicine sheet information in various statistical studies that require non-disclosure of the identity of the patients during the study.

This study extends over one semester including studying and analyzing the results.

3. Results:

The following table (Table 1) shows the descriptive statistics for the sample.

Table 1. Descriptive Statistics for Variables

Variables	Cases	Freque-ncy	Perc-ent	Vali-d Perc-ent	Cumult-ive Percent
size of work	Demand-ed	22	48.9	48.9	48.9
	More than Demand-ed	23	51.1	51.1	100.0
advantages of oral medicine course in clinical practice	useless useful	24 21	53.3 46.7	53.3 46.7	53.3 100.0
Facing difficulty in filling out the sheet	yes no	44.4 55.6	44.4 55.6	44.4 100.0	20 25
supervisor help in filling out the sheet	no yes	13 32	28.9 71.1	28.9 71.1	28.9 100.0
shape of the sheet	Not good good	30 15	66.7 33.3	66.7 33.3	66.7 100.0
time required to complete the sheet	short suffi-cient long	9 16 20	20.0 35.6 44.4	20.0 35.6 44.4	20.0 55.6 100.0
impact of health status and medical history on the time of filling in the sheet	no Yes	12 33	26.7 73.3	26.7 73.3	26.7 100.0
The effect	no	12	26.7	26.7	26.7

of the complexity of oral and dental case on the time of filling out the sheet	yes	33	73.3	73.3	100.0
relationship between Sheet's Information and previous study	null weak moderate strong	7 12 24 2	15.6 26.7 53.3 4.4	15.6 26.7 53.3 4.4	15.6 42.2 95.6 100.0
the need of sheet for the student	no yes	6 39	13.3 86.7	13.3 86.7	13.3 100.0
total evaluation of sheet	Very bad bad acceptable good	5 6 23 11	11.1 13.3 51.1 24.4	11.1 13.3 51.1 24.4	11.1 24.4 75.6 100.0

3.1. The descriptive statistics:

The demographic distribution of the study sample:

The total number of students participating in the survey was 45 students, 60% male. 66.7% of students aged between 23 and 27 years. 93.3% of all students completed high school just before entering the university, and 6.7% obtained the dental technician certificate (2 years) before entering the university. 73.4% of students had cumulative GPA (GPA) ranges between two and three.

The work size done by the student:

In order to determine the level of activity of the student and the extent of the impact on the answers provided, the student was questioned about whether he was doing the work he was asked to do or goes beyond that. The result shows the students are divided according to the activity they are doing, it is clear from above table that nearly half of the students' activity (48.9%) is limited to the assigned while others perform higher level of activity.

The advantages of Oral Medicine course in the clinical practice:

With respect to students' prospect of the usefulness of oral medicine course in clinical practice, it appears that the students are divided on this point as the previous table shows. We find that little more than half of the students (53.3%) believe that the course of Oral Medicine is not useful in clinical practice, while 46.7% of them believe that it is useful.

The difficulty of filling the oral Medicine sheet:

Regarding the characteristics of Oral Medicine sheet, students were asked about the difficulty they face in filling out the sheet. Statistics show that students are also divided in regards to this aspect. It appeared that 55% of them did not face any problem in filling out the sheet.

The role of the practical aspects' supervisors in filling out the sheet:

Results show that supervisors played a role in helping students to fill in the sheet, but this effect is not enough. Although 44% of students had difficulty in filling out the sheet, it is concluded that about one-third of the students did not receive such assistance.

Students' opinion in the shape of the studied sheet:

When students were asked about the layout of the sheet, the majority stated that it was badly formulated (about 66% of the students) compared to the one-third who confirmed that it is good.

Students' opinion of the appropriate time required to complete the sheet:

In regards to the time required to complete the sheet, results show that a good portion of the students (44.4%) consider it to be long.

The pathological condition and clinical story of the patient and its effect on the time of filling out the sheet:

Most students agreed that the health status and medical history (Table 1), as well as the complexity of the dental and oral case had an impact on the time of filling out the sheet. Seventy three percent of students admitted the impact of the aforementioned factors on the time of filling out the sheet.

The degree of correlation between Oral Medicine vocabulary and information contained in the Oral Medicine sheet:

As for the relationship between information contained in the sheet with what student has already studied, most of the students (95.6%) have agreed that this link is moderate to null which raises a big question about the theoretical information that a student receives and the degree of its association with the scientific and applicable study or of the actual practice of the dentist.

The opinion of the students on the need to use this sheet in the course of Oral Medicine:

Based on the majority of the answers, the sheet is necessary for the student as confirmed by most of them.

Total Evaluation of Oral Medicine Sheet:

Regarding the total evaluation of the sheet, we note that the research sample members in their evaluation of the sheet had different answers. But what is striking is that 50% of them had their assessment of the sheet as moderate, and 75% of them have given an assessment of acceptable or below, while only 25% of them have given a good estimate.

3.2. Test hypotheses:

The descriptive of the previous variables gives a first impression about these variables and their relationships. However, to give a final judgment on these relations, we opted for some tests as following.

3.2.1. First hypothesis: The sheet is difficult to fill in

We noticed previously that about 44% of the students have faced difficulty in filling out the sheet and about 56% of them did not find it difficult, does this result enables us to judge that the sheet is not difficult? To test this hypothesis, binary distribution test has been used that tests the hypothesis that the percentage who found it difficult to fill in sheet is equal to the ratio who found that this sheet is not difficult [6]. The following table (Table-2) shows the result of this test.

We note from the test result that the test was not significant at the level of significance 0.05 (sig> 0.05) and thus accepting the null hypothesis that this ratio is equaled for students i.e. we cannot consider sheet difficult to filling and it cannot be considered easy as the students' opinion are divided in this regard.

3.2.2. Second hypothesis: Sheet does not fit the diagnosis of the patient's condition

Noting the students' answers about the suitability of the sheet to diagnose the patient's condition, we see that the answers are divided and tend to be negative (No). To test the proportion of those who consider that the sheet is appropriate to diagnose the patient's condition, we used the binary distribution test [7]. The table-2 shows the results.

Note from the test result that the test was not significant at the level of significance 0.05 (sig> 0.05) and thus accepting the null hypothesis that this ratio is equal for students i.e. sheet cannot be considered to fit the diagnosis of the patient's condition.

3.2.3. Third hypothesis: supervisors do not help students in filling out the sheet

Reviewing student answers about supervisors' help in filling out the sheet. We note that a large part of them receives such assistance. To test this hypothesis, we also used the binary distribution test that tests the hypothesis that the ratio of supervisors who helped them fill in the sheet is equal to the ratio of supervisors who did not help them in filling out the sheet [8]. The following table (Table 2) shows the result of this test.

We note from the test result that the test is significant at the level of significance 0.05 (sig <0.05) and thus rejecting the null hypothesis that this ratio is equal for student i.e. Supervisors actually help the students in filling out the sheet.

Table 2. The Binomial test
- Asymptotic significances are displayed. The significance level is 0.05
- First test shows the ratios of persons facing difficulty in filling out the sheet and those not facing difficulty in filling out the sheet, and shows no significance.
- Second test shows that ratio of students' perception of sheet influence on diagnostic, and shows no significance.
- Third test shows that the supervisors help in filling out the sheet (their ratio is 71.1%)

	Null Hypothesis	Test	Sig	Decision
1	The categories defined by I faced difficulty in filling the sheet and I did not face difficulty occur with probability 0.5 and 0.5	One-Simple Binomial Test	.551	Retain the null hypothesis
2	The categories defined by the sheet influence the diagnostic (yes) and (no) occur with probability 0.5 and 0.5	One-Simple Binomial Test	.766	Retain the null hypothesis
3	The categories defined by the supervisors help in fillinig out the sheet (yes) and (no) occur with probability 0.5 and 0.5	One-Simple Binomial Test	.007	Reject the null hypothesis

3.2.4. Fourth hypothesis: time needed to fill the sheet is appropriate

The following table (Table 3) shows that the average measurement of the time required to complete the sheet is equal to 2.24 with a standard deviation equal to 0.77, indicating that students tend to consider filling out the sheet takes relatively long time. To test whether the noticeable difference is significant or not, Student test has been used [9].

The test result shows that the test is significant with a level of significance 0.05 (sig <0.05) and thus rejecting the null hypothesis which considers that the time required to fill the sheet is appropriate and accept the premise that the time required to fill out sheet is long.

3.2.5. Fifth hypothesis: sheet does not link to what the student has learned

Statistics show, as set in the following table, that the average of points on this question is equal to 2.47, which is lower than the point assigned to the answer that links to its average. To find out whether we have a fundamental difference, Student test was used [10], as shown in table-3.

The test result show that the test is significant at the level of significance 0.05 (sig <0.05) and thus rejecting the null hypothesis which considers that the link between the sheet and what the student has learned is an average correlation and we accept the premise that this link is weak.

3.2.6. Sixth hypothesis: The total assessment of the sheet is average

To test the level of students' assessment of the sheet, we used the Student test. Results given in previous table. The test result shows that the test was not significant at the level of significance 0.05 (sig> 0.05) and thus accepting the null hypothesis, which is that the evaluation of the sheet is average or not good.

Table 3. T-test for One-Samplet
- **first part of the table shows the descriptive statistics for the different variables**
- **second part shows the tests:**
1. **first test shows that the time needed to fill in the sheet is more than sufficient (more than value 2 which reflects sufficient level)**
2. **second test shows that the link between the sheet and what the student has learned is weak (less than value 3 which reflects the average level)**
3. **third test shows that total assessment of the sheet is acceptable (value 3)**

	N	Mean	Std. Deviation	Std. Error Mean
Time needed to fill the sheet	45	2.24	.773	.115
Link between	45	2.47	.815	.121
the sheet and what the student has learned				
Total assessment of the sheet	45	2.89	.910	.136

One-Sample Test						
	Test Value = 2					
Time needed to fill the sheet	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval	
					Lower	Upper
	2.121	44	.040	.244	.01	.48
	Test Value = 3					
Link between the sheet and what the student has learned	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval	
					Lower	Upper
	-4.392-	44	.000	-.533-	-.78-	-.29-
	Test Value = 3					
Total assessment of the sheet	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval	
					Lower	Upper
	-.819-	44	.417	-.111-	-.38-	.16

4. Discussion:

The importance of this study comes from being concerned with methods of teaching followed in Syrian universities and the influence of these methods on the educational outcomes in these universities. Thus, the quality of the input has an impact in achieving the outputs of good quality. This study aims to assess the Oral Medicine sheet used in the clinical diagnosis of pathological condition of patients attending clinics at the Faculty of Dentistry at the Syrian Private University.

Investigations about the opinions of students of the sheet and the factors that can affect its quality as the difficulty of filling or the time that it takes for a student to fill them and how they relate to what the student has learned in his theoretical study, has a great contribution and impact on how to get a good diagnosis of the pathological condition which can be reflected in the development of appropriate treatment plan. Additionally it highlights a contributing factor to reach a good sheet and relates to the role played by supervisors in helping students fill out the sheet and get to a better diagnosis.

The results show that students are divided in their opinions on the level of difficulty in filling out the sheet may be the disparity in returns opinion to the role of the supervisors of the students, as it is when it is the role of the supervisor in a more positive student will help students find it easy for him to fill in the sheet and vice versa. However, given that most of the students agreed that the supervisors are doing their part in helping the students, it poses a serious question about the sheet and quality of itself.

As for the point needed to fill in the sheet it combines time students that the time required to fill out a long sheet, which is not for the benefit of the quality of the sheet. As the length of the time needed to complete the sheet may affect the collection of data provided by the patient.

In terms of the information contained in the sheet and its linkage to what the student has learned, it seems that it isn't closely correlated, which may pose an important question about the ability of the sheet with information contained in it to help in reaching a good diagnosis of pathological condition and thus, access the ideal treatment for this case. This is reflected in the opinion of the students, as they all agreed that the sheet used does not help in reaching a good diagnosis.

All these factors prompted the students to give bad assessment of the sheet. As the results show that evaluation of most students of the sheet was below average or in other words, it is deemed a good peek. Thus, we can say that this negative assessment of the sheet comes mainly from the difficulty of filling and its inability to meet the student's need for information that leads to a good diagnosis of the pathological condition. All that motivates supervisors of teaching process to amend this Sheet so that it becomes easier to fill in taking into account including in it information that contribute further to help the student and doctor in giving good diagnosis of the pathological condition.

As a result, this study was based on the views of students which are important as long as they were surveyed impartially and with purpose to show the weaknesses in the teaching process so they can be avoided and improving it for the benefit of the student in the first place, and what may distinguish the Syrian universities, whether private or public. It is useful for supervisors of teaching to adopt scientific methods based on basis, why not, statistics designed to access the best medical sheets model both in oral medicine, or any other course so that they are closely linked to the theoretical section of the subject, to be concise and clear so it does not constitute a burden on the student during his interest in the diagnosis and treatment, but to be a useful tool contributing to good educational and therapeutic processes for dentistry student.

5. Conclusion

The aim of this research is to study and evaluate the Oral Medicine sheet and teaching methods adopted in the teaching of Oral Medicine at the Syrian private university. Based on a sample of fifth- year students in the faculty of Dentistry and survey their opinions on oral medicine course and sheet applied in college for diagnosis. Results show that students believe that Oral Medicine sheet takes a long time to fill as it is not well linked with the theoretical study of student and it does not suit a good diagnosis of the pathological condition of the patient.

Although supervisors assist the students to fill in the sheet, it seems to have a certain degree of difficulty so that a good portion of students see it as difficult and this can be explained by how the assistance provided to students is inadequate or that the sheet is not good. This is the likely possibility because the students generally find that this sheet is not helpful. All this creates the need to adopt an innovative design, which is more convenient and more effective in taking the clinical history of the patient. It is very essential to design the sheet with a high degree of efficiency and cost-effectiveness, which will provide access to the best treatment for this condition.

6. Recommendations

Based on previous results, following recommendations that may be useful in improving teaching methods or improve the quality of oral medicine sheet approved in the Syrian private university enabling the sheet to help in better diagnose of the patient's condition are:

- Reformulation of Oral Medicine sheet so that it is easier to fill in, and include questions related to direct and concise diagnostic aspects.
- Reducing the number of questions to be limited to the important and useful questions in the diagnostic process, which does not take a long time to fill in the sheet.
- Greater emphasis on the role of supervisors to clarify the information contained in the application and make a greater effort to help the students in improving their performance in the practical side of the Oral Medicine course.

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