



The Effect of Vacation on Clinical Skills of Dental Students at Taibah University

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Abstract

Background: One of the important factors that might have an effect on clinical skills of dental students is time passing without practicing dentistry. There is a paucity of literature on studying this effect.

Objectives: The aim of this research was to study the possible effect of vacation on the development of clinical skills in dental students at Taibah University.

Materials and Methods: Self-administered questionnaire aimed at understanding students' opinion about the possible effect of vacation on their clinical skills development. Statistical comparison of students' marks in operative requirements before and after the midterm vacation was also carried out. The targeted sample was dental students at their clinical phase.

Results: Despite the fact that 63.5% of the sample agreed that long vacation had a negative effect on their skills and 58.3% found it difficult to start clinical work after vacation, paired and unpaired sample T-tests showed that there was no significant effect of vacation on their clinical performance. Most of the students appreciated the positive effect of training during vacation. However, only a few had actually got a chance to be enrolled in summer training.

Conclusion: This research sheds light on an important factor affecting clinical skills of dental students. We suggest that summer training in dental practice might be beneficial to help students in competing the effect of long vacation.

Keywords: Dental Students; Clinical Skills; Vacation; Observational Study; Descriptive; Analytical Cross-Sectional Study

Introduction

Over the past century, educators and researchers generated theories in order to explain how people acquire, deploy and organize knowledge and skills [1,2]. Dentistry is one of the health professions that involves the acquisition of basic scientific knowledge together with mastering multiple clinical skills. These skills may include several domains such as: physical examination skills, practical procedures, communication skills, and time management. The three most important components of learning clinical skills include: learning how to perform certain movements (procedural knowledge), why one should do so (underlying basic science knowledge), and what the findings might mean (clinical reasoning) [2,3].

These clinical skills can be also described as the combination of soft and hard skills which are developing throughout the students' lives [4]. Performing these skills is considered as a complex action affected by the endless and intermingled factors in clinical settings, which could be responsible for the development of these skills [5-7].

One of these factors might be time passing without practicing, during break and holidays. Although the effect of time passing without practicing has been studied in many areas like information technology, child education and language retention, little attention has been given to study the effect of this special factor on clinical skills. Moreover, despite the rich amount of research assigned to the assessment of clinical skills, discussion of the affecting factors is still lacking in dental literature.

In response to this gap in the literature this research is aimed to study the possible effect of long vacation, from students' perspectives, on the development of clinical skills in dental student at Taibah University (fourth and fifth year) by using a specially designed questionnaire.

We also studied this possible effect of vacation by comparing students' results in clinical requirements before and after a short break, one month of midterm vacation.

Objective of the Study

The objectives of this research are:

- To find out what if dental students think that long vacation has an effect on their clinical skills development
- To examine the possible effect of vacation on students' marks at practical requirements
- To suggest solutions in order to improve the development of clinical skills during vacation.

Materials and Methods

This is an observational cross-sectional study carried out during the academic years 2017 - 2018. Two parts were conducted in order to serve the research objectives.

Firstly, the effect of long summer vacation, about four months, on the development of clinical skills were highlighted from the students' point of view. This part of the research targeted all dental students at clinical phase, males and females who were studying at the Collage of Dentistry at Taibah University. Those students also have come through summer vacation during their clinical practice. Criteria of this sample ensure that students have the ability to compare their performance before and after the long summer vacation. The total number of the targeted sample was 176 students.

Secondly, a comparison of the students' marks from fourth and fifth years in operative requirement assessment before and after midterm vacation was carried out. The total number of these students was 195 including both males and females' sections. Choosing to include this particular sample was a result of the difficulties encountered in obtaining marks for all students at their clinical phase due to the strict rules and regulations governing marks at the collage.

A specially designed online self-administered questionnaire serves the purpose of the first part of the current research. An online link to the questionnaire was sent to the participants' emails. This questionnaire was created on the Survey Monkey website® and checked for its content and face validities by five experts in

the field of dentistry and dental education. Furthermore, the questionnaire was piloted in order to check its suitability to the sample and perform factor analysis. The final version of the questionnaire consists of seven closed-ended questions aimed at understanding the respondents' opinion about the effect of long vacation on their clinical skills in addition to two demographic questions, asking for gender and academic level. An open-ended question was also added at the end of the questionnaire to explore participants' suggestions and comments.

The second part of the current research involved statistical comparison of students' marks in 'operative requirements' before and after midterm vacation (one month) using SPSS® software.

Ethical approval was obtained from the ethics committee at Taibah University. Participation in this study was voluntary and data were anonymous.

Results and Discussion

The response rate to the questionnaire was 65.3%, which is equivalent to 115. The majority of the sample (about 72%) were female students. Most participants were fifth year students with a percentage of 64.35%.

When asked about the best length of vacation, 'if it should not be more than 3 months', the students' opinions were divided as 49.6% said yes and 44.3% said no. It was found that most of the students (86.1%) felt relaxed and fresh after vacation compared to 9.6% who did not feel that. However, 63.5% of the sample agreed that the long vacation had a negative effect on their skills and 58.3% of students experienced difficulties when started clinical work after vacation. More than half of the students did not see any difference in their marks before and after vacation, while 28.7% noticed that they had a lower practical mark after vacation, and only 13% had higher marks than they had before the vacation. Although 88.7% of students thought that training during summer is beneficial, 58.3% of them did not have any practical training during summer break.

For the second part of the current study a total number of 195 students had their marks compared before and after a one-month vacation. Of this sample, 103 were female and 92 were male, including 99 fourth year and 96 fifth year students. Comparing marks for operative requirement was our concern as we thought it might be the most important ones to reflect clinical skills and meet the objectives of the current research.

The total mean values of students' marks before and after the vacation were 15.83 and 15.88 respectively. In order to do statistical analysis for normally distributed data, Paired Samples T-test

was conducted for individual students and the significance was 0.236 before vacation and 0.688 after vacation (p -value > 0.05). This value indicates that there was no statistically significant difference between the marks before and after vacation for the sample. Unpaired Samples T-test was also conducted to compare the results of the both genders. Similarly, none of the p values were significant.

The discussion of factors that could affect the development of clinical skills in students is lacking in dental literature. The idea of the current research was originally raised by a group of final year dental students who thought long vacation might adversely affect their clinical skills level. Results of the questionnaire support the perspective of that students' group as most of the students thought that long vacation may have an adverse effect on their practical skills. This results was also consistent to what Harrierson, *et al.* [8] found about the concerns of clinical clerkship students of forgetting content knowledge, losing skills, and having difficulty regaining momentum on return after a two week vacation. Despite of what students' feel about the negative effect of vacation on their clinical skills, the results highlighted the strong need to have a relaxing vacation. This finding was also suggested by medical students and nursing home nurses [8-10].

In the contrary to what students think about the negative effect of vacation on their clinical skills, statistical analysis of their marks showed that there was no significant effect of short (1-month) vacation on their skills development. Similar finding was obtained from a study of medical students performance with and without a short break [8].

Depending on these results a conclusion can be made as despite the students concerns about the adverse effect of break; this effect is not necessarily reflected in their achievement. In contrast to what we conclude Adelman, *et al.* [11] found that there should be a minimum of 2.3 half days a week for a full-time physician teachers of family medicine to maintain their clinical skills. Moreover, their involvement in direct patient care was also found to the milestone for maintaining these clinical skills.

Although high percentage of the sample indicated that training during summer vacation would be very helpful to improve their clinical skills, only a few had actually enrolled in summer training. This finding may reinforce the need to facilitate enrolling of dental students in dental practice during long summer vacation.

The results of the current study also suggest that there was no difference in clinical/practical work between the two genders. This results support some studies in dental literature [12].

Limitations of the Study

It would be better if we could had compared the results of students before and after the long summer vacation together with a one-month vacation in order to study the possible difference. Comparing the students' results in more than one academic subject may also add more information to the current research.

Conclusion

This research aimed to study the effect of time passing without practicing dentistry on the development of clinical skills of dental students at Taibah University. Students thought that long vacation could adversely affect their skills. However, comparing their results in operative clinical requirement showed only minimal effect of short vacation. The importance of having programmed summer training for dental students should be reinforced.

Conflict of Interest

No conflict of interest.

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