Published online 2021 August 2.



Research Article

Status of the Textbooks Used by the Dentistry Students of Kermanshah University of Medical Sciences, Iran (2018)

Atefeh Khavid¹, Mostafa Godiny¹, and Milad Esmaielei³

¹Oral and Maxillofacial Radiology Department, Faculty of Dentistry, Kermanshah University of Medical Sciences, Kermanshah, Iran
²Endodontics Department, Faculty of Dentistry, Kermanshah University of Medical Sciences, Kermanshah, Iran
³Dentistry Research Committee, Faculty of Dentistry, Kermanshah University of Medical Sciences, Kermanshah, Iran

^{*} Corresponding author: Endodontics Department, Faculty of Dentistry, Kermanshah University of Medical Sciences, Kermanshah, Iran. Email: mostafa.goodiny.dent@gmail.com

Received 2020 December 28; Revised 2021 June 28; Accepted 2021 July 04.

Abstract

Background: The inappropriate use of pamphlets rather than textbooks is an educational problem faced by most students. Notetaking and reading pamphlets rather than reading textbooks regardless of defects and shortcomings with their own structure cannot cover the required materials for students.

Objectives: The present study aimed to investigate the status of the textbooks used by the dentistry students of Kermanshah University of Medical Sciences (KUMS), Iran.

Methods: This descriptive study was conducted on the students of the dentistry school of KUMS. In total, 148 students were selected via random sampling. Data were collected using a valid and reliable questionnaire. Data analysis was performed in SPSS version 18. **Results:** In total, 67.6% of the students used the content presented by professors in the class, and only 2% used the original English textbooks of dentistry. The analysis of the priorities of the type of resource indicated that the highest frequency belonged to the use of printed pamphlets (55.4%), and the lowest frequency belonged to the use of printed versions and electronic audio files (0.7%). Additionally, evaluation of access to resources showed the maximum frequency of a group pamphlet to be 35.8%, while the lowest frequency belonged to the pamphlet prepared by others (2.7%).

Conclusions: According to the results, the students showed great interest in note-taking and reading pamphlets rather than reading textbooks. The insufficient fluency of students in English, high costs of reference books, and a large amount of resources made the students more likely to use pamphlets.

Keywords: Note-taking, Pamphlets, Textbook, Dentistry Students

1. Background

Study habits and skills play a pivotal role in the success of medical students, which are often characterized by a heavy workload, substantial time commitments, and high-stakes testing. Learning and teaching processes require the active cooperation and interaction of students and educators. Several factors are known to affect academic success, such as an organized and integrated program of study, the proper use of educational references and materials, excessive perseverance, consistent class attendance, and efficient study habits. On the other hand, factors such as motivation, learning style, and the time and place of study largely influence students' learning (1, 2).

Textbooks and class handout materials are frequent and important sources of information for students. However, the inappropriate use of pamphlets and notes is a common educational problem faced by most students. A key benefit of using textbooks is that student can refer back to the textbook for missing, misunderstood, or forgotten information, while reading note-taking in class, students may easily forget what they have heard in class (3).

Educational resources in the Iranian medical education system have long been neglected. The examination and evaluation of students are important issues that may concern medical students (4), which in turn leads to their tendency to note-taking and reading pamphlets rather than reading textbooks. Students' notes are generally brief and incomplete compared to textbooks references. Therefore, pamphlets with the shortcomings and deficiencies cannot fully meet the needs of these students (5-7). Class notes have been reported to be more effective in this re-

Copyright © 2021, Educational Research in Medical Sciences. This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/) which permits copy and redistribute the material just in noncommercial usages, provided the original work is properly cited. gard compared to reading English/Persian educational references (8).

The tendency of medical students to using pamphlets instead of textbooks has various reasons. Most students assume that reading textbooks is time-consuming as they lack the adequate proficiency in English as well. Moreover, the teaching methods employed by most faculty members often urge students to take notes in the class (5). In a study in this regard, it was reported that the large volume of educational materials, the need for time, lack of motivation to study, lack of training on different levels of education, inadequacy of available resources in the library, and large volumes of reference books are the factors that highly influence the tendency of students to using pamphlets rather than textbooks (6).

Methods of study largely influence the process of learning in students, thereby helping them acquire more practical skills and decide their future career. Tendency for use of note-taking in classes and using pamphlets instead of textbooks would have destructive influence on the learning and educational processes (5). Therefore, attention and planning is needed to improve study methods.

2. Objectives

It is important to evaluate the wrong study habits among medical students and the reasons of. The present study aimed to investigate the status of the textbooks used by the dentistry students of Kermanshah University of Medical Sciences (KUMS) in 2018.

3. Methods

This descriptive study was conducted on the students of the dentistry school of KUMS. Subjects were selected via random sampling as a total of 146 people.

In order to design and develop a questionnaire, first the questions were extracted from scientific sources according to experts' opinions. To determine the content validity of the questionnaire, content validity ratio (CVR) and content validity index (CVI) were used. The validity of the questionnaire from experts' view and its reliability with Cronbach's alpha coefficient ($\alpha = 0.85$) have been previously confirmed.

Data were collected using demographic questionnaire (age, gender, marital status, place of residence, year of entering university) and a number of items about fluency in English, study hours per day, priority resources, priority type of resources, access to resources, the reasons for the priorities of each sources used and the reasons for not using reference books.

The subjects were recruited with sufficient personal satisfaction and information about the goals and methods of the research and completed the questionnaire. Data analysis was performed in SPSS, and the data were expressed as the mean and standard error of the mean (SEM).

4. Results

The mean age of the students was 22.43 ± 2.5 years, and 50% of the subjects were female; 93.9% were single. The mean demographic data (Table 1) and the frequency of the students' answers to the main items of the questionnaire (Table 2) are shown.

| ble 1. Demographic Information | | | | |
|--------------------------------|------------|--|--|--|
| Variables | No. (%) | | | |
| Sex | | | | |
| Male | 74 (50) | | | |
| Female | 74 (50) | | | |
| Marital statues | | | | |
| Single | 139 (93.9) | | | |
| Married | 9 (6.1) | | | |
| Address | | | | |
| Dormitory | 58 (39.2) | | | |
| Father's house | 76 (51.4) | | | |
| Student house | 14 (9.5) | | | |
| Year of university entrance | | | | |
| 1391 | 11 (4.4) | | | |
| 1393 | 23 (15.5) | | | |
| 1394 | 31 (20.9) | | | |
| 1395 | 26 (17.6) | | | |

According to the obtained results, 67.6% of the students used the content presented by professors in the class, and only 2% used original English textbooks. In addition, 10.1% of the students used textbooks, and 20.2% used translated references.

Analysis of the priority type of resource showed that the highest percentage was with printed pamphlets (55.4%), and the lowest percentage was with using printed versions and electronic audio files (0.7%).

In terms of access method to resources, the maximum percentage was with group pamphlets (35.8%), and the low-

| able 2. Frequency of Students' Responses to Main Questionnaire Items | | | |
|--|------------|--|--|
| Variable | No. (%) | | |
| Fluency in English | | | |
| Excellent | 5 (2.4) | | |
| Good | 19 (12.8) | | |
| Moderate | 101 (68.2) | | |
| Weak | 23 (15.5) | | |
| Hours of studying | | | |
| ≤ 1 | 118 (79.8) | | |
| 2 | 16 (10.8) | | |
| 3 | 6 (4.1) | | |
| 4 | 6 (4.1) | | |
| \geq 5 | 2 (1.4) | | |
| Priority of references | | | |
| Content presented by professors in class | 100 (67.6) | | |
| Textbook | 15 (10.1) | | |
| Reference sources in original language | 2(2) | | |
| Translated reference sources | 20 (20.2) | | |
| Priority of type of resources used by the students | | | |
| Printed versions | 1(0.7) | | |
| Handwritten pamphlets | 60 (40.5) | | |
| Electronic video file | 4 (2.7) | | |
| Printed pamphlets | 82 (55.4) | | |
| Electronic audio file | 1(0.7) | | |
| Access to resources | | | |
| Buy resources | 25 (16.9) | | |
| Noting | 26 (17.6) | | |
| Pamphlet that is prepared by others | 4 (2.7) | | |
| Pamphlet of previous years | 20 (12.5) | | |
| Prepare a group pamphlet | 52 (25.8) | | |
| Library | 10 (6.8) | | |
| Recording voices of professors | 10 (6.8) | | |

est percentage was with pamphlet that is prepared by others (2.7%). The overall results revealed a lack of fluency in English as a reason for not using original textbooks, as well as the high costs of reference books and the large amount of content (Table 3). The mean variables are shown (Table 4).

5. Discussion

The results of the present study indicated that less than 5% of the students used original textbooks, and less than

| ariable | No. (%) |
|--------------------------|------------|
| arge amount of resources | |
| Endorse | 140 (94.6 |
| Ambivalent | 7(4.7) |
| Reject | 1(0.7) |
| extent | |
| Endorse | 12 (8.1) |
| Ambivalent | 113 (74.4) |
| Reject | 23 (15.5) |
| ligh costs | |
| Endorse | 141 (95.3) |
| Ambivalent | 2 (1.4) |
| Reject | 5(3.4) |
| luency in English | |
| Endorse | 142 (95.9) |
| Ambivalent | 1(0.7) |
| Reject | 5(3.4) |
| nsufficient resources | |
| Endorse | 136 (91.8) |
| Ambivalent | 2 (1.3) |
| Reject | 10 (6.6) |
| ack of time | |
| Endorse | 128 (86.5 |
| Ambivalent | 4 (2.7) |
| Reject | 16 (10.8) |
| nsufficient facilities | |
| Endorse | 131 (88.5) |
| Ambivalent | 6 (4.0) |
| Reject | 11 (7.4) |
| ack of interest | |
| Endorse | 15 (10.1) |
| Ambivalent | 6 (4.0) |
| Reject | 127 (85.8) |
| light before exam | |
| Endorse | 122 (82.4) |
| Ambivalent | 5 (3.4) |
| Reject | 21 (14.2) |
| nadequate training | |
| Endorse | 130 (87.8 |
| Ambivalent | 7(4.7) |
| Reject | 11 (7.4) |
| ack of motivation | |
| Endorse | 74 (50) |
| Ambivalent | 10 (6.8) |
| Reject | 64 (43.2) |

| Fable 4. Mean Variables | | | | | | |
|--|-----|-----------------|-----|-----|--|--|
| Variable | No. | Mean \pm SD | Min | Мах | | |
| Demographic information | | | | | | |
| Age (y) | 148 | 2.43 ± 2.50 | 18 | 33 | | |
| Priorities | | | | | | |
| Original English textbook | 148 | 1.70 ± 2.26 | 13 | 25 | | |
| Translated textbook | 148 | 1.75 ± 2.08 | 9 | 19 | | |
| Textbook | 148 | 2.87 ± 2.16 | 14 | 26 | | |
| Literature provided by professors in class | 148 | 1.48 ± 2.44 | 12 | 23 | | |
| Not using textbook | 148 | 1.07 ± 1.88 | 12 | 23 | | |

a quarter preferred translated books. More students preferred using the content presented by professors in the class. Therefore, students of KUMS showed great interest in note-taking and reading pamphlets instead of reading textbooks. Also, the preferred form of study in the KUMS students was printed pamphlets.

In a previous study, Pirhaji et al. reported that more students used pamphlets instead of textbooks (9), which is in line with our observations. Rashidian examined the efficacy of diverse learning styles used by students in basic medical sciences, reporting that class notes were most effective, whereas materials such as English/Persian resources had the smallest share (8). Interestingly, Torshizi et al. carried out a study and reported contradictory results with our findings. They reported that the majority of students used books as the main source of study (10). This discrepancy could be due to the differences in teaching methods and references recommended by professors.

The present study revealed that most students study for one hour or less each day. In a study, Ravari et al. investigated the pattern of time management in the college students of Kerman University of Medical Sciences (Iran), and the results showed that the majority of the participants studied for one hour or less during the day, while some studies have indicated that students at Stanford and Cornell University study for 46 and 49 hours per week, respectively (11). In another study, Azimian reported that most of the participants studied for 22-56 minutes a day, and only 8% studied more than 100 minutes (12).

Since using notes instead of books is an important problem in learning and teaching, it is essential to investigate the causes of this inefficient method in educational processing. With the progress of science and technology, fluency in English is an important factor affecting the learning process, and this ability is essential to academic achievement and attain updated medical knowledge (13). Therefore, the insufficient fluency of students in English makes them more likely to use the pamphlets and literature provided by professors. Our findings indicated that the majority of the students had moderate fluency in English, and a few had official certificates of the English language. Therefore, a lack of fluency in English to read original textbooks makes students use note-taking and pamphlets. In this regard, Mardanian and Kazerouni zadeh reported that 84% of students, 76% of interns, and 90% of medical residents study translated books (14). In another study, only 2.7% of students used original references (2). The results of the present study showed that due to the insufficient fluency of the students in English, high costs of reference books were imposed, and substantial resources were significant factors that predisposed students to prefer note-taking and reading pamphlets/notes.

5.1. Conclusions

Overall, the students had positive attitudes toward note-taking in the class as their main source of educational input. Moreover, the insufficient fluency of the students in English, high costs of textbooks, and the substantiality of resources made the students more likely to use the notetaking and pamphlets.

Footnotes

Authors' Contribution: Atefeh Khavid: investigat ion of orginal draft; Mostafa Godiny: writting and edition of manuscript; Milad Esmaielei: investigation.

Conflict of Interests: There was no conflict of interest.

Ethical Approval: This study was approved by the Ethics Committee of KUMS (ethics code: KUMS.REC.1397.536).

Funding/Support: Hereby, we extend our gratitude to Kermanshah University of Medical Sciences for the support of this research project.

References

- 1. Amin Z, Eng K. *Basics in Medical Education*. 2nd ed. Hackensack, NJ: World Scientific; 2009.
- Salem Safi R, AshrefRazaee N, Sheikhi N, Khosh klam M, Makhdoomi K, Nabilo B. [Investigation of studying styles of Urmia medical science university's students]. J Urmia Nurs Midwifery Fac. 2010;8(2):76–82. Persian.
- Gupta B, White DA, Walmsley AD. The attitudes of undergraduate students and staff to the use of electronic learning. *Br Dent J.* 2004;**196**(8):487-92. doi: 10.1038/sj.bdj.4811179. [PubMed: 15105865].
- Newble D. Revisiting 'The effect of assessments and examinations on the learning of medical students'. *Med Educ*. 2016;**50**(5):498–501. doi: 10.1111/medu.12796. [PubMed: 27072435].
- Ghazavi A, Rafiei A, Mosayebi G, Abtahi H. [The attitude of Arak Medical University student's about reasons of tendency to use the lecture notes instead of textbooks 2008]. *Arak Med Univ J.* 2010;12(4):73–80. Persian.
- Sanagoo A, Jouybari LM, Ghana S, Sadeghi AlhaAbadi J, Rahimi M, Sedghi S. [Students' attitude towards note-taking and reading pamphlets/handouts in courses]. *Future Med Educ J*. 2013;3(3):3–6. Persian.

- Zhang J, Peterson RF, Ozolins IZ. Student approaches for learning in medicine: what does it tell us about the informal curriculum? *BMC Med Educ*. 2011;11:87. doi: 10.1186/1472-6920-11-87. [PubMed: 22013994]. [PubMed Central: PMC3209448].
- Rashidian M. [Effectiveness of different types of learning materials used by students in courses of basic medical sciences]. *Abstracts of 5th National Congress on Medical Education*. Iranian Journal of Medical Education; 2002. 45 p. Persian.
- 9. Pirhaji O, Mollabashi R, Haghdoost F, Meidani M. [Medical student's study resources : Books or notes]. *Iran Jof Med Educ*. 2012;**11**(A):1461–5. Persian.
- Torshizi M, Varasteh S, Poor Rezaei Z, Fasihi R. [Study Habits in Students of Birjand University of Medical Sciences]. *Iran J Med Educ*. 2013;**12**(11):866–76. Persian.
- Ravari A, Alhani F, Anoosheh M, Mirzaie-Khalilabadi T. [The pattern of time management in college students of Kerman University of Medical Sciences in the year 2006]. *Iran South Med J.* 2008;11(1):76–84. Persian.
- Azimian J. [Evaluation of study in medical studens of Qazvin university of Medical Sciences]. Edrak J. 2008;3(10):24–8. Persian.
- Karimkhanlouei G. [Breathing life into ESP classrooms the role of motivation and attitudes]. J Med Educ Dev. 2013;6(12):89–94. Persian.
- 14. Mardanian F, Kazeroonizadeh M. [Study styles of students, interns and residents of obstetrics and gynecology in Shahid Beheshti Hospital in Isfahan]. *Iran J Med Educ*. 2004;**3**(2):73–7. Persian.