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OPEN PEER REVIEW

Evaluation of the Knowledge Level of Dental Students Regarding the Dental Management of Medically Compromised Patients

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About this report

This open peer review (OPR) report shows the public comments made on this article during peer review, by the reviewers, the associate editor and the editor-in-chief, for every revision round, together with the authors' replies. Comments appear only with the consent of the people who wrote them. Reviewers who chose to sign their report are named; the others are shown as "Referee". Comments are edited for language only, and confidential remarks to the editors are not included.

More about open peer review: brieflands.com/knowledgebase/opr

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1 Original submission

4 comments · 16 Mar 2024 – 4 Apr 2024

Referee 1 Reviewer

MAJOR REVISION 16 Mar 2024

dear author please:

Clearly explain the participant selection process.
Explain the sampling method in detail. Was census or convenience sampling used?
Provide a complete explanation of the data collection process.
Specify the criteria and explain how to divide the groups into weak knowledge, average knowledge, and good knowledge.
Clarify the inclusion and exclusion criteria for the study.
Clearly explain the reason for using test-retest and Cronbach's alpha and how to analyze the reliability of the questionnaire.
Please explain why the four categories of cardiovascular diseases, AIDS, medical and dental emergencies, and other systemic diseases were evaluated.
Clearly explain the third questionnaire.
The questions in the questionnaires do not cover the objectives of the research.
The articles used in the discussion section are not relevant.
Tables and results should be written according to the main variables of the research.
The discussion is not in line with the results and goals of the research.
The conclusion should be revised based on the research objectives.
The research ethics code should be mentioned.
Remove references before 2014 and replace them with newer ones.

Referee 2 Reviewer

MAJOR REVISION 3 Apr 2024

Dear author
The title is not appropriate and needs to be revised.
Abstract
Introduction:
This sentence (line10) contradicts the previous content. Please review.

Methods:
The method is incomplete. The sampling is not described. The confidence level is not known.
Results :
Report the main and important results. The way the mean and standard deviation are written is not correct.

Conclusion:
The conclusion of the abstract should be expressed in line with the findings.

Keyword
Match the keyword with MeSH.

Introduction
The introduction needs revision. Also, the text lacks coherence and integration. Previous research and the necessity of conducting the study are not mentioned.
Methods

Explanations should be clearer and categorized. Write in the ethical approval section.
The validity of the questionnaire was not reported. Awareness questions are designed with yes/no responses and scores of 0 and 1. What the author wrote is more like a frequency report than a knowledge score.
Results
Demographic characteristics should be reported in the table.
The title of table 3 should be changed to " Frequency distribution of answers to two-choice questions of dental students about dental management of medically compromised patients".
It is suggested that the answers be expressed separately by sex (table3).
Why didn't you use a correlation or regression test?
Discussion
Regarding the year of entry and the knowledge score, you obtained a meaningful relationship, but it was not mentioned in the discussion.
The discussion needs strengthening.

Associate Editor MAJOR REVISION 3 Apr 2024

Dear author
Please check the comment and reply to it.

Editor-in-Chief MAJOR REVISION 4 Apr 2024

Dear author
Please check the comments and reply to them.

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Revision 1

AUTHORS' RESPONSE TO REVIEWERS

Authors' reply to reviewers

The next pages contain the authors' point-by-point reply to the comments of this revision round, as submitted with the revised manuscript. It is published as the authors wrote it.

Dear editor

Thank you to you and the esteemed referees for their patience and thorough review of the submitted article. I have carefully considered and addressed each of the objections raised:

Clearly explain the participants selection process.
Explain the sampling method in detail.census or convenience sampling method?
Provide a complete explanation of the data collection process.
Clarify the inclusion and exclusion criteria for the study.

Resp: The method section was rewritten.For example the following text was added in the article in order to satisfy the opinion of the respected referee (above 4 comments).

Students who were in their clinical studies and internship in dentistry, proficient in Persian, and whose names were registered in the education department met the criteria for participation in the study. Exclusion criteria included a background in basic and pre-clinical sciences or a lack of consent to participate. The project manager utilized the list of students enrolled in practical courses at the time of the research, totaling 345 individuals, whose attendance was required across various departments. With permission from department lecturers at Ahvaz Dental Faculty, questionnaires were distributed to 50 students randomly selected from each entry. The study's objectives and the confidentiality of results were verbally explained to the students, who were then requested to complete the questionnaire and return it. Any clarifications regarding the questionnaire could be sought from the question design moderator. Student identification was not required on the questionnaire.Each student was allotted two hours to complete the questionnaire, and the act of returning the questionnaire signified consent to participate. Full completion of all questions was mandatory, and incomplete questionnaires were excluded from the study.

Specify the criteria and how to divide the groups into weak knowledge, average knowledge, good knowledge?

Resp. The knowledge section of the questionnaire comprised 20 questions, with each correct answer awarded one point. A perfect score of 20 indicated a high level of knowledge. The classification of knowledge levels was as follows: Scores ranging from 0 to 6.6 were categorized as weak knowledge, scores between 6.67 and 13.33 were considered average knowledge, and scores above 13.33 were indicative of good knowledge. These explanations can be found in the methodology, materials, and fourth paragraph of the document.

Explain clearly the reason for using test-retest, Cronbach's alpha and how to analyze the reliability of the questionnaire.

Resp. In this study, the t-test was utilized to compare knowledge levels between two distinct groups: men and women, or students from different incoming classes.

Please explain why the four categories of cardiovascular diseases, AIDS, medical and dental emergencies and other systemic diseases were evaluated?

Resp. Due to the high prevalence of cardiovascular diseases and the need for dental students to be familiar with the methods of transmission of blood-borne infections such as HIV and the need for dentists to provide emergency first aid to patients, more focus was given to the questions related to these parts in the questionnaire[7].

Clearly explain the about the third questionnaire.

Resp.. This study was conducted using a three-part questionnaire, with the third part intended to gather responses from students on satisfaction or dissatisfaction with the teaching approach for the course on systemic diseases in the educational curriculum, as well as their interest or lack of .interest in the course. However, in reality, the third part of the questionnaire was not utilized

The questions of the questionnaires do not cover the objectives of the research.

Resp. These questions are sourced from two dental reference books that focus on the dental considerations for patients with systemic conditions. These questions form the basis for relevant courses taught to students and are developed using similar studies. The questionnaire's validity is also determined by the input of five oral disease specialists from the University's Faculty of Dentistry in Ahvaz. The link to the specified books is provided below.

https://www.google.com/books/edition/Dental_Management_of_the_Medically_Compr/u3g4DwAAQBAJ?hl=en

https://medpdf.ir/downloads/%D8%AF%D8%A7%D9%86%D9%84%D9%88%D8%AF-/%DA%A9%D8%AA%D8%A7%D8%A8-burkets-oral-medicine-13th-edition

The articles used in the discussion section are not relevant

. **Resp.16.** All the articles referenced in the discussion section are related to the topics covered in the dental reference books "Little: Dental Management of the Medically Compromised

Patient" and "Burket Oral Medicine." The latter book includes chapters on dental considerations for various diseases, such as those affecting the heart, lungs, endocrine system, musculoskeletal system, cancer, anemia, and more. The link to access this book is provided in the preceding section. In light of the esteemed reviewer's feedback, references ... and ... have been updated, leading to modifications in the discussion paragraph. Ryalat et al. from Jordan found that 39% of dentists were unaware of the correct guidelines for patients needing antibiotic prophylaxis, a finding inconsistent with the present study. This discrepancy could be attributed to differences in the study population (students versus dentists) and the study locations (Iran and Jordan).

Tables and results should be written according to the main variables of the research.

Resp. In the author's opinion, the item in question has been noted in the results section. However, I would appreciate it if the reviewer could kindly provide guidance in this area so that any necessary corrections can be made in accordance with the esteemed reviewer's opinion.

The discussion is not in line with the results and goals of the research.

Resp. The aim of the research was to assess the awareness level of dental students regarding the dental considerations of common and significant systemic diseases. Additionally, the questionnaire included inquiries about the students' interest in this subject and their satisfaction with the teaching approach. These questions, as presented in Table Three, were asked. The results of the questionnaire are detailed in the results section. The discussion section delves into the comparison and analysis of the awareness results with findings from other studies in the second through sixth paragraphs. The seventh paragraph discusses the outcomes of the third part of the questionnaire. Finally, the last paragraph of the discussion outlines the research limitations**.**

The conclusion should be revised based on the research objectives.

Resp. Although final-year students exhibited greater knowledge compared to their peers in lower years, overall, students' understanding of the dental considerations related to systemic diseases was deemed average. The

majority of students expressed dissatisfaction with the teaching approach for this subject.

The research ethics code should be mentioned.

Res: The code of ethics is in the text. I highlighted it in the text of the article

Remove references before 2014 and replace them with newer ones.

Res: The references were modified, except for the reference 19

Reviewer 2:
Dear author

The title is not appropriate and needs to be revised.

Response. Changed: Evaluation of the knowledge level of dental students about the dental management of medically compromised patient

Abstract
Introduction:
This sentence (line10) violates the previous content. Please review.

Resp : Correction done.

The chances of survival of people suffering from various systemic diseases have increased due to medical advances and better access to medical services

Methods:
The method is incomplete. The sampling is not described. The confidence level is not known.

Resp: This descriptive cross-sectional study was conducted among clinical students of the Ahvaz Faculty of Dentistry. A sample size of 150 people was selected using a convenience sampling method. To collect data, a self-made questionnaire was used regarding the dental management of medically compromised patients. T.test and Mann-Whitney tests are used for statistical analysis of quantitative variables. The significance level in statistical tests is considered to be 0.05, and p-value values less than 0.05 are considered as significant differences.

Results :

Report main and important results. The way of writing mean and standard deviation is not correct.

Resp. In the studied population, the average knowledge was 9.60 (SD=3.45) and the knowledge of dental interns was higher than other students. The analysis of the variance test showed that the mean scores of the total knowledge were significantly different in four entries (P>001). The level of knowledge of dental interns was higher than other students. More than seventy percent of students were not satisfied with the teaching method of this course..

Conclusion:
The conclusion of the abstract should be expressed in line with the findings.

Resp. The level of awareness of dental students about the dental considerations of systemic patients is not high, and the students are not satisfied with the way this course is taught.

Keyword
Match the keyword with the mesh.

Dental students, Awareness, Patients, Systemic disease

Introduction
The introduction needs revision. Also, coherence and integration were not seen in the text. The previous researches and the necessity of conducting the study are not mentioned.

The introduction was rewritten to provide the opinion of the respected referee

Methods
Explanations should be clearer and categorized. Write in the ethical approval section.
The validity of the questionnaire was not reported. Awareness questions are designed with yes, no and scoring 0 and 1. What the author wrote is more like a frequency report than a knowledge score.

The method was rewritten to provide the opinion of the respected referee

Results

Demographic characteristics should be reported in the table.
The title of table 3 should be modified as " Frequency distribution of answers to two-choice questions of dental students about dental management of medically compromised patients".
It is suggested that the answers be expressed separately by sex (table3).
Why didn't you use correlation or regression test?

I asked the statistics consultant your question several times, but unfortunately he did not answer. However, according to the statistics consultant, the following tests were performed on the results of the study:

1- Analysis of variance test to investigate the difference in the average score of total knowledge in four academic entrances

2-LSD post hoc test to check and compare two by two the average score of total awareness in four entries

3-Kolmogorov Smirnoff test at the level of 0.05

4-Chi-square and Kruskal-Wallis tests

But due to the limitation in the number of words and the number of tables, we tried to include the most important ones in the manuscript. For this reason, demographic information was included in the text.

I corrected the title of table three.

Discussion
Regarding the year of entry and the knowledge score, you obtained a meaningful relationship, but it was not mentioned in the discussion.
The discussion needs strengthening.

Res: Changes were made in the discussion section

2 Revision 1

4 comments · 16 May 2024 – 17 May 2024

Referee 2 Reviewer — MINOR REVISION — 16 May 2024

The manuscript has been improved, but some things still need to be modified. Suggested items were marked as comments and highlighted in red in the manuscript file.

Referee 1 Reviewer — ACCEPT — 16 May 2024

The authors have carefully considered and addressed each of the objections raised.

Associate Editor — MINOR REVISION — 17 May 2024

This article needs minor revision.

Editor-in-Chief — MINOR REVISION — 17 May 2024

This article needs minor revision.

3

Revision 2

AUTHORS' RESPONSE TO REVIEWERS

Authors' reply to reviewers

The next pages contain the authors' point-by-point reply to the comments of this revision round, as submitted with the revised manuscript. It is published as the authors wrote it.

Dear editor

Thank you to you and the esteemed referees for their patience and thorough review of the submitted article. I have carefully considered and addressed each of the objections raised:

1-Please delete the of: Evaluation of the knowledge level of dental students about the dental management of medically compromised patient

Resp: The suggestion of the respected referee was applied.

Evaluation the knowledge level of dental students about the dental management of medically compromised patient

2-Please correct : In this study the mean score of knowledge was 9.60 ± 3.45

Resp: The suggestion of the respected referee was applied.

3- The introduction is not coherent and needs to be sorted

4- In a study reported that

Resp: The suggestion of the respected referee was applied.

5- Please delete this Sentence.

Resp: The suggestion of the respected referee was applied.

6- The mean age of subjects was 24.4± 1.93.

Resp: The suggestion of the respected referee was applied.

7- Modify according to the green highlight.

Resp: The suggestion of the respected referee was applied.

8- Modify according to the green highlight.

Resp: The suggestion of the respected referee was applied.

9- The title of the table is long. Please modify as follows:

Frequency distribution of students' responses to dental management questions of medically injured patients

Resp: The suggestion of the respected referee was applied.

10- The title of the figure is dumb and ambiguous

Res: The figure title was modified as follows.

Comparison of the mean knowledge of students of different entrances in the studied subjects

3 Revision 2

1 comment · 21 May 2024

Editor-in-Chief

ACCEPT 21 May 2024

This article is accepted.