Knowledge, attitude, and practice of dentists regarding periodontal tissue health in Birjand, Northeast Iran

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Abstract

Background. Determining what dentists know and believe about periodontal tissue properties is important to establish prevention practices. The present study aimed to investigate the knowledge, attitude, and practice of general dental practitioners about the properties of periodontal tissue around retainable teeth in Birjand, Northeast Iran.

Methods. The knowledge, practice, and attitude of 91 dentists about periodontal tissue properties around retainable teeth were assessed by a validated researcher-made questionnaire.

Results. The results showed that the mean score of dentists' attitude, knowledge, and practice were 70.7, 88.2, and 77, respectively. The mean score of the attitude of male dentists was higher than females significantly (P = 0.014).

Conclusion. It is highly recommended that continuing courses should be held to improve their knowledge.

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The practice section consisted of nine 3-choice questions to show how dental practitioners adhered to the principles and, if necessary, whether they referred the patient to a specialist. The participants were given a score between 1 and 3 according to the correct answer. To determine the levels of knowledge, it was divided into poor, moderate, and good. To determine the levels of attitude, it was classified into poor, moderate, and good.

Quantitative data were reported as mean (±SD), and qualitative data were shown as frequency and percentage.

Results
Thirty-nine subjects (44.8%) were female, and 48 (55.2%) were male; 44.8% of dentists had less than ten years of experience, 33.3% had 10-20 years of experience, and 21.8% had more than 20 years of experience (Table 1), 50.6% in the private practice, 39.1% in the clinic, and 10.3% in both.

The knowledge levels of dentists were 62.1% and 37.9% as moderate and good, respectively. All the participants had good attitudes about the characteristics of periodontal tissues around retainable teeth. Regarding dentists’ practice levels, 5.7% had moderate, and 94.3% had good practice, and none had poor practice (Table 2).

The total mean score of attitude was 12.49±3.53. Male dentists had a significantly higher score than female dentists (P=0.014; Table 3). There was a significant difference in knowledge based on work experience so that dentists with a history of more than 20 years had the lowest level of knowledge.

Discussion
Clinical decision-making has been a very important topic in the last decade. Unfortunately, diagnosis and treatment planning are problematic skills that have not been well emphasized in the education of dental students in the past.\textsuperscript{1}

This study aimed to assess the level of knowledge, attitude, and practice toward the characteristics of periodontal tissues around retainable teeth among dentists.

The results of this study showed that participants’ knowledge was slightly lower than the average. Participants who worked in governmental clinics were more knowledgeable than those in private clinics.

In this study, most participants had a moderate level of knowledge. In a study on dental students' knowledge about oral health and periodontal health, many participants were aware of this issue.\textsuperscript{7}

Our results showed that all the participants had a positive general and personal attitude towards characteristics of periodontal tissues around retainable teeth. Generally, this finding was similar to a study in South Africa,\textsuperscript{8} showing that the majority had a positive attitude. However, it was difficult to make item-by-item comparisons due to the discrepancy in designed questions and assessment methods. In the present study, 37.9% of dentists had good knowledge, and 94.3% showed good performance. Lower knowledge and higher performance in the present study than other studies might be attributed to differences in the study sample.

Conclusion
According to the results of this study, more attention should be directed towards policy-making for educational programs. Moreover, due to the importance of periodontal health, the incorporation of programs that can promote

| Variable | Status | Frequency (n) | Percent |
|----------|--------|---------------|---------|
| Gender   | Male   | 48            | 55.2    |
|          | Female | 39            | 44.8    |
| Work Experience | 10-20 | 29            | 33.3    |
|          | <20    | 19            | 21.8    |
| Location | Clinic | 34            | 39.1    |
|          | Both   | 9             | 10.3    |

| Table 2. The level of knowledge, attitude, and practice among participating dentists |
|----------------------------------|-----------------|-----------------|-----------------|-----------------|
| Level               | Knowledge | Attitude | Practice |
|                     | Number     | Percent | Number | Percent | Number | Percent |
| Poor                | 0          | 0       | 0      | 0       | 0      | 0       |
| Medium              | 54         | 62.1    | 0      | 0       | 5      | 5.7     |
| Good                | 33         | 37.9    | 87     | 100     | 82     | 94.3    |
| Total               | 87         | 100     | 87     | 100     | 87     | 100     |

Table 3. Comparison of mean scores for knowledge, attitude, and practice regarding periodontal tissue characteristics among participating dentists by gender

| Scale    | Gender | N   | Mean ± SD | P value |
|----------|--------|-----|-----------|---------|
| Knowledge | Male   | 48  | 11.81 ± 1.77 | 0.264   |
|          | Female | 39  | 12.28 ± 2.12 |         |
| Attitude | Male   | 48  | 49.22 ± 2.52 | 0.014   |
|          | Female | 39  | 47.66 ± 3.27 |         |
| Practice | Male   | 48  | 23.20 ± 2.10 | 0.159   |
|          | Female | 39  | 22.46 ± 2.79 |         |

P value: Independent t-test.
closer interactions between oral health and the general health can enhance the practice of dentists.

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Authors’ contributions
MM and MZ designed the experiments. MZ collected data. FO performed the statistical analyses and wrote the results section. FO and MM interpreted the results. MZ wrote the initial manuscript. FO critically reviewed and modified the manuscript. All authors have read and approved the final manuscript.

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Availability of data
The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Ethics approval
This article was extracted from a dissertation approved by the Ethics and Scientific Committee of Birjand University of Medical Sciences, Iran, under the code the code IR.BUMS.REC.1399.033.

Competing interests
The authors declare that they have no competing interests.

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