

Knowledge, Attitude, and Practice of General Dentists Regarding Informed Consent in 2023: A Cross-Sectional Survey in Yazd, Iran.

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Abstract

Background and objectives: Despite developments in the field of patient rights laws in Iran, there is still no single policy in the field of informed consent, which may be interpreted as the formality of obtaining consent without considering its principles. No domestic studies were found on this topic, especially in the dental field. Therefore, this study was conducted to evaluate the Knowledge, Attitudes, and Practices (KAPs) of dentists regarding informed consent in Yazd.

Materials and methods: In this cross-sectional study of 146 dentists, a pretested, researcher-made self-administered questionnaire was used. Mann–Whitney and Kruskal–Wallis tests were performed for analysis.

Results: Knowledge and practice levels were considered acceptable, but attitudes were not. There was no significant difference in knowledge or attitude scores based on age, gender or years of clinical experience. Practice scores did not differ based on sex, but there was a significant difference according to age and years of clinical experience. There was a moderate direct correlation between the practice score and both the attitude and knowledge scores.

Conclusion: The KAP of Yazd dentists, especially regarding the principles of obtaining informed consent, needs improvement.

Keywords: Health knowledge, Attitude, Informed consent, Dentists, Practice.

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1. Introduction

Informed consent is a process in which a person, after being informed about all aspects of a treatment or research process, voluntarily declares his/her desire to participate (1). There are three primary forms of informed consent: implied, verbal, and written. Implied consent is inferred from the patient's behavior, such as in emergency situations. Verbal consent is used for routine minor treatments such as diagnostic and preventive procedures, and written consent is used for extensive treatments requiring anesthesia or sedation, any irreversible interventions, surgical or aggressive procedures and the prescription of drugs with severe side effects (2).

Informed consent in dental care is as much a moral imperative as it is an important legal issue (3). Dental treatments, even when performed in the best way, may have unexpected results (4). Therefore, the dentist must provide the patient with adequate information about all aspects of treatment and ensure that the patient can make an informed decision (3). Written informed consent can be waived for diagnostic procedures such as examinations and radiographs unless the patient is unwilling, in which case an "informed refusal" must be obtained from the patient (4).

Without providing informed consent, dentists may be exposed to legal criticism (5). The concept of consent for treatment has been increasingly considered in the legal courts of many

Western countries such as England. In fact, any dentist who cannot prove that the patient has properly consented to the treatment has exposed himself to legal action (6). In Iran, dentists should not start treatment without obtaining the informed consent of the patient or their legal guardian, except in urgent cases (7). In 2015, Gupta et al. reported that unbalanced knowledge of informed consent among Indian general dentists has increased the need for awareness programs to fill knowledge gaps and modify attitudes in this field (1). In a study by Nono et al. in 2022, only 5.3% of Ugandan dentists obtained written informed consent from patients, and the authors concluded that dentists should place greater emphasis on the use of written informed consent in dental care (3). Despite recent developments in patient rights and informed consent laws in Iran, there is still no policy on shared decision-making in its true sense, which may be interpreted as the formality of obtaining consent without paying attention to the necessary principle (8). In Iran, a similar study was not found in the field of dentistry, but Shaker et al., in 2018, stated that in 11 Iranian public hospitals, the current situation of obtaining informed consent from patients is not favorable, and it seems that transforming informed consent from a formal state to a real informed choice requires comprehensive interventions (9).

Considering the importance of the subject and the lack of a similar domestic study, this research was developed and executed to explore the knowledge, attitudes and practices of general dentists regarding informed consent in Yazd, Iran.

This study answers the following questions. What was the level of knowledge, attitudes and practices of general dentists regarding the concept of informed consent and the principles of obtaining it? In the selected community, was there a relationship between the score of awareness, attitude and performance in obtaining informed consent and demographic characteristics? What were the perceptual or practical gaps that needed interventions to correct?

2. Materials and methods

Filling the informed consent section at the beginning of the online version of the questionnaire was considered as an inclusion criterion. The questionnaires were distributed online on the Porsline platform. Incomplete questionnaires were replaced with new questionnaires.

After designing the questionnaire, a panel of experts was used to check validity, and the Content Validity Index (CVI) and Content Validity Ratio (CVR) were calculated as 0.96 and 0.85, respectively.

For reliability, the questionnaire was completed by 10 dentists, and Cronbach's alpha was measured as 0.76. The sampling method used convenience sampling. Considering the confidence level of 95% and according to the results of Lal et al.'s 2017 study (10), taking into account the standard deviation of the knowledge scores equal to 2.44 and the estimation error $d = 0.5$, the number of required participants was estimated to be 146

dentists. The participants were selected with the help of a random table of numbers from the list of names of general dentists in Yazd.

$$n = \frac{z^2 s^2}{d^2}$$

To collect the data, a researcher-made questionnaire was used (Supplement 1), which was completed by the participants via a self-reporting method. The questionnaire included demographic information on the participants, 7 knowledge questions, 5 attitudinal questions and 8 practical questions.

For the positive questions, "yes" and "always" received 2 points; "I'm not sure", "Sometimes" and "I have no opinion" received 1 point; and "No" and "Never" received 0 points. For negative questions, "no" received 2 points, "I am not sure and have no opinion" received 1 point, and "yes" received 0 points. Negative questions mean questions 3 of the knowledge section and 3, 4, and 5 of the attitude section, where the optional essay was written incorrectly. In our study, an acceptable level above 70% of the maximum score in each field was considered.

After collecting the data, they were coded and entered into the computer, and the results were analyzed using SPSS.26 software and descriptive statistics.

Statistical analysis

After the data were collected, they were coded, and the results were analyzed by SPSS.26 software. The Mann-Whitney test was used to compare two groups, and the Kruskal-Wallis test was used to compare several groups due to non-normal distribution of data. The correlation between the demographic characteristics of the participating dentists (age, sex and clinical experience) with the obtained scores was also analyzed.

3. Results

To check the normality of the data, Shapiro-Wilk test was used and based on the test results, the score variables of knowledge, attitude and performance questions did not have a normal distribution. Mann-Whitney and Kruskal-Wallis and Pearson's correlation coefficient were used for data analysis. A significance level of 0.05 was considered.

Statistical analysis was performed on the data of 146 completed questionnaires. Notably, incomplete questionnaires were replaced with new questionnaires.

The participants were 80 (54.8%) men and 66 (45.2%) women. The mean age of the participants was 35.03 ± 9.22 years, and the average number of years of clinical experience was 8.53 ± 8.67 . The demographic characteristics of the patients are listed separately in Table 1.

The frequency distributions of dentists' responses to the questions on the three areas of knowledge, attitudes and for practices for each question are shown in Tables 2, 3, and 4.

The mean scores obtained for knowledge, attitudes, and practices were 10.6 ± 1.88 out of 14, 5.96 ± 1.94 out of 10 and 11.48 ± 2.87 out of 16, respectively.

The mean scores in the field of knowledge and practice were more than the acceptable limits and were desirable, but in the field of attitude, the mean score was undesirable.

According to Table 5, the median knowledge score among female dentists was 11.00, and that among male dentists was 10.50. There was no statistically significant difference in the average knowledge of dentists according to sex (P value > 0.05). The median knowledge score among dentists aged 18-29, 30-39, and 40-49 years was 11.00, and that among dentists aged 50 years and older was 10.00. No statistically significant difference was observed between the knowledge of dentists in different age groups (P value > 0.05).

The median knowledge score among dentists with less than 5 years, 5-9 years, and 10 years of experience or more was 11.00. No statistically significant difference was observed in the knowledge of dentists according to clinical experience (P value > 0.05).

The median score for attitudes among male and female dentists was 6.00. No statistically significant difference was observed in the attitudes of dentists according to sex (P value > 0.05).

The median attitude scores among dentists aged 18-29 years, 30-39 years and 50 years and older were 6.00 and 5.50, respectively, among dentists aged 40-49 years. No statistically significant difference was observed between the attitudes of dentists in different age groups (P value > 0.05).

The median attitude score among dentists with less than 5 years of clinical experience, 5-9 years of clinical experience and 10

years or more of clinical experience was 6.00. No statistically significant difference was observed in the attitudes of dentists according to clinical experience (P value > 0.05).

The median score of practice among male and female dentists was 12.00. There was no statistically significant difference in the average practice of dentists according to sex (P value > 0.05).

The median practice scores among dentists aged 18-29 years, 30-39 years and 50 years and older were 12.00 and 11.00, respectively, among dentists aged 40-49 years. A statistically significant difference was observed between the average practice of dentists in different age groups (P value < 0.05).

The median practice score among dentists with less than 5 years, 5-9 years and 10 years of clinical experience or more was 12.00. A statistically significant difference was observed in the practice of dentists according to clinical experience (P value < 0.05).

Pearson's correlation coefficient was used to determine the correlation between knowledge and practice scores and demographic variables in dentists (Table 6). To determine the intensity of the relationship, the Cohen criteria were used; values less than 0.1 were considered to indicate very low (negligible) correlation, values between 0.1 and 0.29 were considered to indicate little (weak) correlation, values between 0.3 and 0.49 were considered to indicate moderate correlation, and values greater than 0.5 were considered to indicate high correlation.

There was a strong inverse correlation between the attitude score and age. This means that with increasing age, the attitude score decreased strongly. There were moderate direct correlations between the practice score and both the attitude score and knowledge score. This means that with an increase in attitude and knowledge level, the practice score also increased.

Table 1. Frequency distribution of participants according to demographic characteristics.

Characteristics		Frequency (%)
Gender	Male	80 (54.8)
	Female	66 (45.2)
Age	24-29	50 (34.2)
	30-39	58 (39.7)
	40-49	20 (13.7)
	≥ 50	18 (12.3)
	≤ 5	68 (46.6)
Clinical Experience	5-9	33 (22.6)
	≥ 10	45 (30.8)

Table 2. The frequency distribution of dentists' responses to knowledge questions.

Number	Question	Response	Response Rate (%)
1	I know the definition of informed consent and its contents.	Yes*	77 (52.7)
		No	10 (6.8)
		Not sure	59 (40.4)
2	Restorative procedures require written consent due to their irreversibility, even if they are noninvasive.	Yes*	79 (54.1)
		No	41 (28.1)
		Not sure	26 (17.8)
3	Written consent is needed for fluoride therapy.	Yes	63 (43.2)
		No*	54 (37.0)
		Not sure	29 (19.9)
4	It is necessary to get the patient's consent before starting the treatment.	Yes*	129 (88.4)
		No	8 (5.5)
		Not sure	9 (6.2)
5	Parents' consent is necessary for mentally disabled patients and children.	Yes*	135 (92.5)
		No	5 (3.4)
		Not sure	6 (4.1)
6	In case of invasive dental treatment for a pregnant woman, the husband's written consent is also needed.	Yes*	103 (70.5)
		No	14 (9.6)
		Not sure	29 (19.9)
7	In prescribing premedication such as using oral sedatives before dental treatment, it is necessary to obtain the patient's written consent.	Yes*	105 (71.9)
		No	15 (10.3)
		Not sure	26 (17.8)

Table 3. The frequency distribution of dentists' responses to attitude questions.

Number	Question	Response	Response Rate (%)
1	In my opinion, obtaining informed consent helps the treatment process.	Yes*	118 (80.8)
		No	6 (4.1)
		I have no opinion	22 (15.1)
2	I believe that obtaining informed consent reduces the patient's anxiety about treatment complications.	Yes*	53 (36.3)
		No	52 (35.6)
		I have no opinion	41 (28.1)
3	In my opinion, informed consent protects the patient's rights more than it protects the doctor's rights.	Yes	51 (34.9)
		No*	50 (34.2)
		I have no opinion	45 (30.8)
4	I believe that obtaining informed consent is a formality process.	Yes	35 (24.0)
		No*	85 (58.2)
		I have no opinion	26 (17.8)
5	I believe that stating the details of the treatment in the consent form may increase the patient's expectations from the result of the treatment.	Yes	72 (49.3)
		No*	51 (34.9)
		I have no opinion	23 (17.8)

Table 4. The frequency distribution of dentists' responses to practice questions.

Number	Question	Response	Response Rate (%)
1	I obtain informed consent routinely.	Sometimes	76 (52.1)
		Never	19 (13.0)
		Always*	51 (34.9)
2	If the patient does not express his informed consent verbally or in writing, I will not perform the treatment.	Sometimes	41 (28.1)
		Never	14 (9.6)
		Always*	91 (62.3)
3	I definitely receive written consent from all patients who are candidates for surgical treatment.	Sometimes	56 (38.4)
		Never	23 (15.8)
		Always*	67 (45.9)
4	If requested by the patients or their guardians, I provide them with a copy of the written consent form.	Sometimes	39 (26.7)
		Never	19 (13.0)
		Always*	88 (60.3)
5	I fully explain the estimated treatment costs to the patient while obtaining consent or before.	Sometimes	15 (10.3)
		Never	1 (0.7)
		Always*	130 (89.0)
6	The risks/side effects of treatment are included in the written consent form used for my patients.	Sometimes	44 (30.1)
		Never	25 (17.1)
		Always*	77 (52.1)
7	All available treatment options are presented to the patient in the informed consent form that I use.	Sometimes	56 (38.4)
		Never	38 (26.0)
		Always*	52 (35.6)
8	I personally explain the provisions of informed consent to patients in simple nonscientific terms.	Sometimes	34 (23.3)
		Never	10 (6.8)
		Always*	102 (69.9)

Table 5. Median and interquartile ranges of knowledge, attitudes, and practices scores according to sex, age, and clinical experience.

knowledge score			
Characteristics	Median	Iqr	P value
Gender	Male	11.00	0.19
	Female	10.50	
Age	18-29	11.00	0.088
	30-39	11.00	
	40-49	11.00	
	≥50	10.00	
Clinical Experience	≤5	11.00	0.080
	5-9	11.00	
	≥10	11.00	
attitude score			
Characteristics	Median	Iqr	P value

Gender	Male	6.00	3.00	.268
	Female	6.00	3.00	
Age	18-29	6.00	3.00	.343
	30-39	6.00	2.25	
	40-49	5.50	4.75	
	≥50	6.00	3.25	
Clinical Experience	≤5	6.00	3.00	.287
	5-9	6.00	2.50	
	≥10	6.00	3.50	
practice score				
Characteristics		Median	Iqr	P-value
Gender	Male	12.00	3.25	.890
	Female	12.00	3.00	
Age	18-29	12.00	4.00	.030
	30-39	12.00	2.00	
	40-49	11.00	5.75	
	≥50	12.00	3.25	
Clinical Experience	≤5	12.00	4.00	.026
	5-9	12.00	2.50	
	≥10	12.00	3.28	

Table 6. Correlations between age, clinical experience, knowledge, attitudes, and practices.

		Knowledge score	Attitude score	Practice score
Age	Pearson Correlation	-0.142	-0.79	-0.180*
	P value	0.088	0.343	0.030
Clinical Experience	Pearson Correlation	-0.145	-0.089	-0.184*
	P value	0.080	0.287	0.026
Knowledge score	Pearson Correlation	1	0.238**	0.374**
	P value		0.004	0.00
Attitude score	Pearson Correlation	0.238**	1	0.332**
	P value	0.004		0.00
Practice score	Pearson Correlation	0.374**	0.332**	1
	P value	0.00	0.00	-----

4. Discussion

Recently, medical ethics has become increasingly important in developing countries. However, the teaching of these topics in medical and dental schools is still in the early stages and has a long way to go before reaching international standards (10). Despite the changes that have taken place in the field of patient rights law in Iran, there is still no single policy in the field of informed consent, which may be interpreted as the recognition of consent without considering its principles. No domestic studies were found in this field, especially in the field of dentistry. Therefore, this study was conducted with the aim of evaluating the Knowledge, Attitude and Performance (KAPs) of dentists in Yazd regarding informed consent.

Since there are generally few studies available on dentists' awareness of informed consent and there are no similar studies in Iran to the best of the authors' knowledge, it was not easy to compare our findings with those of previous studies.

In this study, the knowledge and practice levels were considered acceptable, but the attitude level was not favorable. Lal et al. (10), in 2017, evaluated the knowledge and practice levels of Pakistani dental practitioners about informed consent as poor, but Butt et al. (11), in 2022, reported that the majority of dentists in Lahore had good knowledge and practice in the field of informed consent. We were not able to compare the two domestic studies over time.

Based on the results of this study, no significant statistical relationship was found between the knowledge score of the participants and sex, which was similar to the results of studies conducted by Butt et al. (11), Gupta et al. (12), Yashoda et al. (13), and Lal et al. (10).

In the present study, no significant relationship was observed between the knowledge score and the age of the participants, which was in agreement with the results of the study by Gupta et al. (12) and Lal et al. (10) but Yashoda et al. (13) found that there was a significant relationship between the knowledge score and age, so the knowledge of the participants was greater in the age group younger than 35 years, which may be attributed to the loss of information over time. The results of this study contrast with those of the current study, which may be the reason for the limited education received in this field, even during the years of study in Iran.

No significant correlation was found between the knowledge score and clinical experience, which was in accordance with the results of a study by Butt et al. (11), but it was not similar to the results of the studies conducted by Gupta et al. (12), Yashoda et al. (13), and Lal et al. (10). In these studies, with the increase in clinical experience to more than 10 years, the knowledge score of dentists has also increased, which can be attributed to the increase in experience and knowledge resulting from participation in training courses, workshops and conferences, or seeking information after legal problems occur for themselves or colleagues. As mentioned earlier, this increase was not significant in our study.

In this study, no significant statistical relationship was observed between the attitude score and gender, which was similar to the results of the study by Gupta et al. (12). However, Schouten et al. (14) reported a significant relationship between these two variables. In this study, there was no statistically significant relationship between the attitude score and age, which was consistent with the results of the study by Gupta et al. (12). In this study, no significant statistical relationship was found between the attitude score and clinical experience, which was in accordance with the results of the study conducted by Gupta et al. (12).

In the present study, there was no statistically significant relationship between the practice score and gender. The same was reported by Butt et al. (11).

A significant statistical relationship was found between practice score and age in this study, which was not discussed in recent studies. In the present study, a significant statistical relationship was found between practice score and clinical experience. This finding was not in relation to the results of Butt et al.'s study (11). The correlation between the mentioned variables is inverse, which means that with increasing age and clinical experience, the quality of practice weakens. This problem can be attributed to the failure of the participants to update their information over time and forget the previous information or insufficient emphasis on practical adherence to obtaining informed consent in the course of dental education in Iran. This deficiency has been shown more clearly in inappropriate self-efficacy than in knowledge.

There were significant moderate direct correlations between the practice score and both the attitude score and knowledge score in the present study. This means that with an increase in attitude and knowledge level, the practice score also increased. In the Dutch study by Schouten et al. (14), there was a moderate correlation between attitude and performance, although both were not rated favorably. These correlations were not discussed in most recent studies.

According to the answers received, only half of the dentists were aware of the full definition of informed consent. Koura et al. (15), Veeresh et al. (16), Gupta et al. (12), Simha et al. (17) and Lal et al. (10), the majority of the practitioners were aware of the exact definition, which is in contrast with our findings.

The majority of the participants believed that informed consent should be obtained before starting treatment, which is in agreement with the results of several previous studies (1, 3, 16, 18, 19). However, in the study by Gupta et al. (12), only half of the participants agreed with this issue, and only one-fifth of them had practical adherence to obtaining consent before starting treatment.

As previously mentioned, in performing restorative procedures, due to the irreversibility of the treatment, written consent must be obtained, but only half of the participants in the study were aware of this issue, which is considered a knowledge gap. Koura et al. (15) also reported that a quarter of participants did not obtain written consent from their patients in nonsurgical

treatments, and according to Gupta et al.'s study (12), only approximately one-fifth of the participants agreed with the necessity of written consent in case of nonsurgical treatments. In the study conducted by Veeresh et al. (16), only one-third of the participants who received nonsurgical treatments provided written consent.

In the current study, the majority of dentists agreed that it is necessary to obtain the consent of parents or guardians to treat children or those with mental disabilities. Similarly, in some previous studies, the majority of dentists believed that obtaining consent from parents is necessary for children to receive treatment (1, 3, 10, 18, 19)

According to Islamic laws in Iran, if there is a possibility that treatment for the wife may be dangerous for her fetus, it is necessary to obtain her husband's consent (20). Approximately three-quarters of the dentists were aware of this matter, which is probably due to the high social sensitivity toward it.

In this study, most of the dentists believed that obtaining informed consent would aid in the treatment process. The same was reported by other studies (14-16), but in Gupta et al.'s study (12), less than half of the participants agreed with this opinion. In the present study, half believed that stating the details of the treatment on the consent form may increase the patient's expectations of the treatment. In the study by Schouten et al. (14), in the Netherlands, the majority of dentists believed that the principle of informed consent leads to the commercialization of the dentist-patient relationship. There was also fear of legal formalities and difficulty in what patients should be informed about.

Informed consent was obtained from only one third of the participants routinely in daily practice. According to the study by Rodrigues et al. (21), obtaining informed consent is not a routine clinical practice for one-third of dentists. Koura et al. (15), Yashoda et al. (13), Gupta A. et al. (1) and Farhat et al. (22), and approximately half of the participants provided consent as part of their daily routine. However, in Avramova et al.'s study (18), more than three-quarters of the participating dentists were committed to obtaining informed consent in their daily therapeutic activities, which is more favorable than our study. This superiority may be attributed to receiving more relevant training in clinical courses, continuing to receive knowledge after graduation, and the gradual increase in knowledge in this field in the Bulgarian dental community.

Less than half of the study participants provided written consent for surgical treatments. In the study by Avramova et al. (18), approximately one-third of participants provided written consent for all treatments, and 11% provided written consent for only surgical treatments. In Lal et al.'s study (10), a quarter of the participants consented to surgical treatments. In Farhat et al.'s study (22), half of the participants in various fields and one-fifth, specifically only in surgical treatment, provided written consent. In the study by Veeresh et al. (16), 85% of the participants provided written consent for surgical treatment. Therefore, compared to the participants in the present study,

they have acted more strongly in this field, which is probably due to the emphasis of the training they received on the consequences of not obtaining written consent that can be cited by legal authorities. Since this weakness in practice may lead to possible legal problems for dentists, there seems to be a need for further investigation and improvement.

More than half of the participants provided a copy of the consent form to the patient upon request. In the study conducted by Koura et al. (15), three-quarters of the participants were aware of the patient's right to have a copy of the consent form. However, in Gupta et al.'s study (1) and Gupta et al.'s study (12), less than one-third of the participants did so, which does not match the results of our study. In the study by Nono et al. (3). Moreover, in the study by Veeresh et al. (16), the majority of the participants provided a copy of the consent form when the patient requested it. Therefore, in this study, a significantly lower percentage of participants actually did this.

Most of the participants explained the estimated treatment costs to the patient while providing consent or before. This finding is in agreement with the results of the studies conducted by Avramova et al. (18) and Veeresh et al. (16). In general, and especially in societies with economic problems, awareness of treatment costs may affect patient satisfaction with continuing treatment, and it is better for dentists to not neglect this point.

In this study, half of the participants stated that they mentioned the possible risks and complications of the treatment in the informed consent form, but in some previous studies (1,15,16,18,19) were included in the consent form, which may be due to greater awareness of the benefits of informing the patient about side effects such as maintaining the patient's trust in the dentist even in the event of complications. Yashoda et al. (13) reported that only one-fifth of dentists did not explain the treatment process or patient prognosis.

In the current study, only one-third of the participants mentioned available treatment options on the consent form. In the study by Koura et al. (15), more than half of the participants were informed about treatment options, and in the study by Avramova et al. (18), the majority of the participants were informed about treatment options. As a result, the performance of the participants in this study was not acceptable in explaining treatment options to the patients in comparison to previous studies. Patient consent to treatment without being aware of alternative treatments harms the authenticity and genuineness of informed consent. It is better to remind dentists of the importance of this matter during retraining programs to maintain respect for patient autonomy.

It is possible to include the topic of informed consent as a part of the dentistry curriculum, and refresher training and continuing education with a focus on dental ethics and the importance of informed consent and its legal impact in dentistry should be held for previous graduates. To achieve more reliable results, it is better to increase the statistical population or to repeat the study in a multicenter manner in Yazd City after providing the necessary training. In the current study, the

statistical population included only general dentists. For a more comprehensive review, it is better to measure both groups of specialists and general dentists. This study was conducted in Yazd city, and the results cannot be generalized to the whole country. Therefore, it is necessary to conduct similar studies in other cities and dental training centers.

5. Limitations

In any survey, there is always doubt as to whether the respondents are answering the questions honestly. There may be a suspicion that they will give answers that they think will please the researchers or tell us what they think is the right answer, even if it is not what they actually think or do. Our use of anonymous and non-face-to-face self-completed questionnaires may have limited these problems. However, the possibility that the answers given may not necessarily reflect the actual day-to-day performance of the respondents should be considered.

6. Conclusion

The mean scores in the field of knowledge and practice were more than the acceptable limits and were desirable, but in the field of attitude, the mean score was undesirable.

There was a moderate direct correlation between the practice score and both the attitude and knowledge scores. The KAP of Yazd dentists, especially regarding the principles of obtaining informed consent, needs improvement.

Ethics

This cross-sectional study was approved by ethical ethics committee of Shahid Sadoughi university of medical sciences (IR.SSU.DENTISTRY.REC.1402.037).

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Authors' contribution

Fatemeh Sadeghi: Data curation, Formal analysis.
Fahimeh Rashidi Maybodi: Conceptualization, Methodology, Original draft Writing - Review & Editing
Vahid Herandi: Conceptualization, Methodology, Writing – Review & Editing

Conflict of Interest

The authors declare no conflict of interest.

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