

Patients' acceptance toward dental laser

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Abstract:

This study aimed to explore the patients feeling toward laser dental treatments. A total of hundred patients in several dental centers were asked about their feeling towards laser treatment in dentistry. Their answers were collected, analyzed and summarized. The patients' perception to laser dental treatment seemed to be positive without prior information about this type of treatment. This result gives us a reason to suppose that Iraqi dental patients were ready to receive this treatment.

Keywords:

Dental laser, laser treatment, patients' acceptance.

Introduction:

Anxiety experienced by dental patients is of concern to most dental practitioners, partly because of its effects on patients and partly because of its effects on dentists themselves. There seems little doubt that patients anxiety can interfere with dental care. The possibility that a visit to the dentist will be a painful one is an important consideration of many patients. It often cited as a reason for both avoidance and anxiety. Patients who had been very anxious about dental care because it was associated with pain in the past may have come to learn that this association was no longer present after a series of pain-free visits. There is a

great desire on the part of dentists to make office treatment easier for their patients, and lasers may provide such an opportunity⁽¹⁾.

In medical applications, the laser is basically a versatile way of delivering energy to precise locations within the body. The energy involved is essentially that of the electromagnetic spectrum and ranges from ultraviolet radiation through the visible spectrum to infrared wavelengths⁽²⁾.

Dentistry is not only catching up with laser-related advancements, but is now surpassing other medical fields with a powerful products which perform a boarder range of procedures than any other single laser related

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product has ever performed in any other specialty⁽³⁾.

When used efficaciously and ethically, lasers are an exceptional modality of treatment for many clinical conditions that dentists or dental specialists treat on a daily basis⁽⁴⁾.

The dental laser offers dentists not only a window but a door into the high-tech arena. So often, dentists are associated with pain, fear, and the noise of the high-speed drill. The laser certainly helps to dispel these stereotypes and apprehensions, bringing dentistry into a new era^(4,5,6). Since the researchers and manufacturers efforts are based on the perceived desires of patients it seems imperative that the perception of patients be queried. This work discusses a survey of the perception of dental patients and whether they feel a laser can reduce the fear of dental treatment.

Materials and Methods:

Patients at several specialist centers in Baghdad were asked if the

were willing to participate in a survey about lasers. No prior information about lasers was given to those patients. The only preselective requirement of patient type was that the patient had to be an adult and able to make their dental care decisions for themselves. The survey included four statements:

1. Lasers make dental treatment easier.
2. Laser treatments worth their higher costs.
3. I accept to take part in a study of dental lasers.
4. I desire to treat my teeth with dental lasers.

The patients were asked to answer with "Yes", "No", or "I don't know". Only those that completed the survey were included in this study. They were 100 patients.

Results:

Table (1) and figure (1) list the answers that the 100 patients gave for the four statements.

Table (1): Distribution of the patient's answers.

Statement	Yes	No	I don't know
1- Lasers make dental treatment easier.	76	5	19
2. Laser treatments worth their higher costs.	53	19	28
3. I accept to take part in a study of dental lasers.	28	63	9
4. I desire to treat my teeth with dental lasers	66	21	13

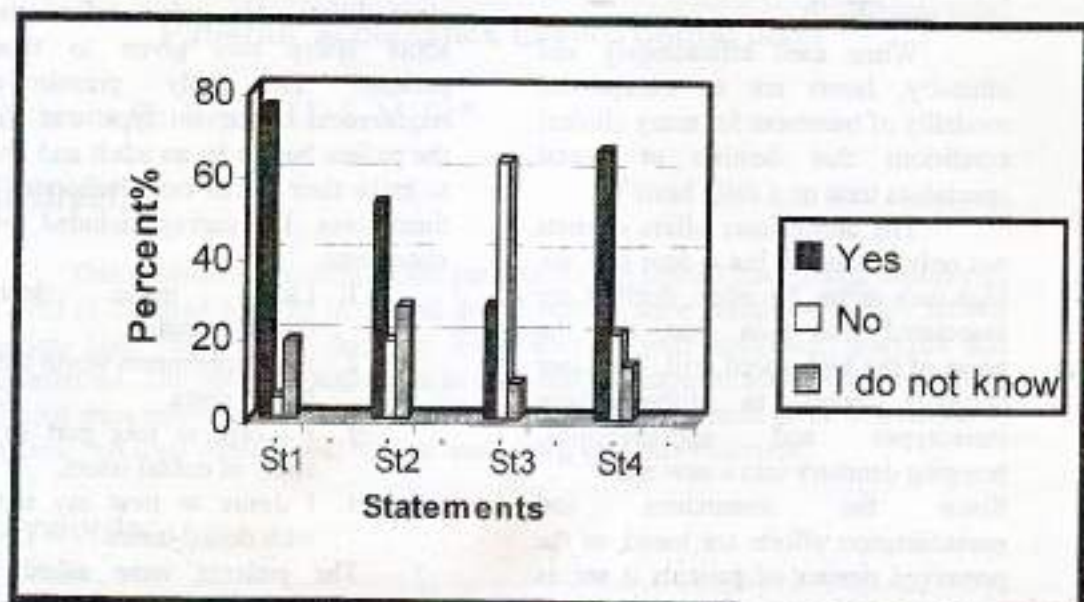


Fig (1): Distribution of the patient's according to their answers.

In the 1st statement, the answers with "yes" were more than 15 times than "No" answers, while 1/5th of the patients answered with "I don't know".

The answers with "Yes" in the 2nd statement were 3 times of "No" answers approximately, the answers "I don't know" were used by about 1/4th of the patient.

The answer with "No" were more than 2-times than the Yes answers in the 3rd statement, however, still 1/10th of the patients answered with "I don't know".

In the fourth statement about 1/10th of the patients answered with "I don't know". The answers with "Yes"

were more than 3 times of the "No" answers.

Discussion:

Sustained interest in laser dentistry is based on the benefits it provides patients and practitioners. Laser techniques benefits patients by reducing invasiveness, inflammation, bacteria, pain, post operative time, the use of injectable local anesthetic, drilling, vibration and sound. They benefit dentists by increasing surgical precision, treatment plan acceptance, patient compliance, and referrals. However, the underlying question is

whether the dental lasers will allay the fears many dental patients have of traditional dental treatment. More precisely; "will dental lasers provide less negative Stimuli than the traditional dental treatment"?

In this study, the patients' perception seems very positive toward lasers. Over three quarters of the patients in this survey felt that the laser would be an easier method of dental care. This response is of great interest considering no information on lasers was given to the patients before the survey.

Over 50% of the patient stated that laser treatment is worth its higher cost. This further substantiates that patients desire that the dental profession continue its quest for replacing traditional painful dental treatments.

Less than 30% of the patients stated that they accept to take part in a study of dental laser. Presumably they do not feel confident enough that such a study will be riskless.

Almost 2/3rd of the patients desired to treat their teeth with laser. The percentage of their answers in this statement is quite near to that about the higher cost of the laser treatment. Kreisberg and Treiman suggested that cost is an important factor in discouraging people from using dental treatment⁽⁵⁾. In this survey the cost seems to be not just an important factor, but the determinate factor

indeed. That's why most patients believe in laser treatment, while a lesser percent want to be treated with it, however, the percent was still more than the half, which is a significant percentage.

The patient perception in this survey is almost the same that of a survey performed by Wigdar in the United States⁽⁴⁾. This means that the patient perception toward dental lasers is very close to that of the highly developed countries.

The important message from this survey is that if patients' wishes are one of the important motivating factors behind dental laser research, then the research presently under way should continue. Patients must not be hurried by dentists with lasers prior to the establishment of proven methods and indications, and the trust of patients in the prudent use of lasers by dentists, must not be compromised.

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The main aim of the study was to assess the acceptance of laser treatment in patients with gingivitis. The study was conducted in a dental clinic. The patients were divided into two groups: control and laser treatment. The control group received conventional treatment, while the laser treatment group received laser treatment. The patients were surveyed before and after treatment. The results showed that the laser treatment group had a significantly higher acceptance rate than the control group. The patients in the laser treatment group reported less pain and discomfort during the procedure. The patients in the control group reported more pain and discomfort during the procedure. The patients in the laser treatment group were more satisfied with the results of the procedure. The patients in the control group were less satisfied with the results of the procedure. The patients in the laser treatment group had a higher level of confidence in the dentist than the control group. The patients in the control group had a lower level of confidence in the dentist. The patients in the laser treatment group had a higher level of knowledge about laser treatment than the control group. The patients in the control group had a lower level of knowledge about laser treatment. The patients in the laser treatment group had a higher level of motivation to undergo laser treatment than the control group. The patients in the control group had a lower level of motivation to undergo laser treatment. The patients in the laser treatment group had a higher level of satisfaction with the laser treatment than the control group. The patients in the control group had a lower level of satisfaction with the laser treatment. The patients in the laser treatment group had a higher level of acceptance of laser treatment than the control group. The patients in the control group had a lower level of acceptance of laser treatment. The patients in the laser treatment group had a higher level of acceptance of the dentist than the control group. The patients in the control group had a lower level of acceptance of the dentist. The patients in the laser treatment group had a higher level of acceptance of the dental clinic than the control group. The patients in the control group had a lower level of acceptance of the dental clinic. The patients in the laser treatment group had a higher level of acceptance of the laser treatment than the control group. The patients in the control group had a lower level of acceptance of the laser treatment. The patients in the laser treatment group had a higher level of acceptance of the dentist and the dental clinic than the control group. The patients in the control group had a lower level of acceptance of the dentist and the dental clinic. The patients in the laser treatment group had a higher level of acceptance of the laser treatment and the dentist than the control group. The patients in the control group had a lower level of acceptance of the laser treatment and the dentist. The patients in the laser treatment group had a higher level of acceptance of the laser treatment, the dentist, and the dental clinic than the control group. The patients in the control group had a lower level of acceptance of the laser treatment, the dentist, and the dental clinic. The patients in the laser treatment group had a higher level of acceptance of the laser treatment, the dentist, and the dental clinic than the control group. The patients in the control group had a lower level of acceptance of the laser treatment, the dentist, and the dental clinic.

Over 50% of the patients stated that their dentist would be happy to use laser treatment for their gingivitis. The patients in the laser treatment group had a higher level of confidence in the dentist than the control group. The patients in the laser treatment group had a higher level of knowledge about laser treatment than the control group. The patients in the laser treatment group had a higher level of motivation to undergo laser treatment than the control group. The patients in the laser treatment group had a higher level of satisfaction with the laser treatment than the control group. The patients in the laser treatment group had a higher level of acceptance of laser treatment than the control group. The patients in the laser treatment group had a higher level of acceptance of the dentist than the control group. The patients in the laser treatment group had a higher level of acceptance of the dental clinic than the control group. The patients in the laser treatment group had a higher level of acceptance of the laser treatment and the dentist than the control group. The patients in the laser treatment group had a higher level of acceptance of the laser treatment, the dentist, and the dental clinic than the control group.

It was found that 50% of the patients stated that they would be happy to undergo laser treatment for their gingivitis. The patients in the laser treatment group had a higher level of confidence in the dentist than the control group. The patients in the laser treatment group had a higher level of knowledge about laser treatment than the control group. The patients in the laser treatment group had a higher level of motivation to undergo laser treatment than the control group. The patients in the laser treatment group had a higher level of satisfaction with the laser treatment than the control group. The patients in the laser treatment group had a higher level of acceptance of laser treatment than the control group.

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The percentage of patients in the laser treatment group who were happy to undergo laser treatment was significantly higher than the percentage of patients in the control group who were happy to undergo laser treatment. The patients in the laser treatment group had a higher level of confidence in the dentist than the control group. The patients in the laser treatment group had a higher level of knowledge about laser treatment than the control group. The patients in the laser treatment group had a higher level of motivation to undergo laser treatment than the control group. The patients in the laser treatment group had a higher level of satisfaction with the laser treatment than the control group. The patients in the laser treatment group had a higher level of acceptance of laser treatment than the control group.

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