

Patients' Perceptions Before, During, and After Orthodontic Treatment

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Although many practices survey their patients after treatment, the results of such surveys have not been reported in the literature. This report describes a survey I designed to gain insight into patients' perceptions of orthodontic treatment, allowing the patients themselves to contribute to the selection of topics.

Survey Method

The survey involved 146 consecutive patients in a single orthodontic practice. All replies were anonymous. The questionnaire was in free form, with patients invited to give their personal opinions in order of priority. Depending on the patients' stage of treatment, they were asked to respond in one of three categories:

- Fears and apprehensions prior to treatment (10% of respondents)
- Greatest dislikes during treatment (49%)
- Recommendations for orthodontists after treatment (41%)

Multiple responses were possible. Points were awarded proportionally, according to the order of priority for each respondent.

Results

The combined results in order of priority were as follows:



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Fears and apprehensions prior to treatment

1. Appearance/peer-group response
2. Injury from wires sticking out
3. Injections
4. Pain
5. Impressions
6. Effect on speech
7. Difficulty of brushing

Greatest dislikes during treatment

1. Pain (pressure, wires, discomfort)
2. Elastomeric ligature discoloration
3. Appearance
4. Impressions
5. Need for retainers
6. Dietary restrictions
7. Headgear
8. Waiting-room delays
9. Less frequently mentioned:
 - Effect on speech
 - Difficulty of brushing
 - Contact-sport limitations

Recommendations for orthodontists

1. Reduction of fees
2. True and accurate timing estimates
3. Detailed discussions throughout treatment
4. Elimination of elastomeric discoloration
5. Punctuality
6. Smoother wires and bands
7. Faster treatment
8. Reduction in amount of impression material
9. More extensive warnings about pain
10. Less frequently mentioned:
 - More flexible hours
 - Keeping teen magazines in waiting room
 - Progress reports
 - Better oral hygiene instruction
 - Flavored impression material
 - Keeping mouth open for shorter periods

Discussion

No patient suggested that any of the factors mentioned would cause him or her to refuse orthodontic treatment. The general tone was that the improvements would lead to more pleasant treatment and thus a better response to appliance therapy.

Of the pretreatment fears listed, most are justified and should be calmly discussed in the consultation. The surprising fear of injections is a fantasy from general dental experience that could easily be dismissed.

The No. 1 dislike during treatment was pain.¹⁻⁴ Investigators have found that about 30% of patients suffer considerable pain for the first four or five days after placement of fixed appliances; a further 50% report discomfort when eating or clenching, and the remaining 20% feel no pain whatsoever. Since pain response is impossible to predict, every patient should be given a prepared emergency pack including written advice, analgesics, wax, etc.

Even though yellowing of elastomeric ligatures was a problem only for patients with clear appliances, it was the second most detested feature of treatment overall. Many said that if they had known about discoloration, they would have chosen metal brackets instead. Others elected to wear colored ligatures, which partly defeated the esthetic purpose of clear brackets. These results indicate that non-staining clear elastomerics are urgently needed from orthodontic manufacturers.

Complaints about elastomeric discoloration were particularly vehement from adult patients, who made up 34% of the sample. Adults tended to agree with the adolescents in other categories, except that they were less concerned about reaction from their peer group.

Seven percent of the patients dreaded impressions; some even admitted apprehension about the completion of treatment because it entailed impressions for retainers. To these patients, a method that reduces the choking sensation is essential. Several patients suggested that flavored impression material

would also be an improvement.

It surprised me that 7% of the respondents expressed a dislike for retainers. Headgears achieved 100% disfavor from those who had to wear them. Total elimination of these devices may be impossible, but clinicians should keep patients' reactions in mind when designing treatment plans.

Meticulous patients tend to become concerned that they will be unable to brush their teeth properly during treatment. Careful instruction and assurance should resolve this issue.

Of the recommendations for orthodontists, the first three—reduced fees, better treatment timing, and more detailed discussions—call for more attention to practice administration and communication. Punctuality, faster treatment, pain warnings, and most of the less frequent comments also fall into this category. Improvements in ligatures, wires, and bands need manufacturing solutions. Some patients felt unable to offer advice, and others said no advice was necessary.

Conclusion

The results of this survey of patient perceptions can point out areas of concern in practice management and make delivery of orthodontic care more satisfying for both patient and orthodontist. Clinicians who do not already conduct similar surveys may want to consider doing so in their own practices.

REFERENCES

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