Patients Expectation of Orthodontic Treatment in Chennai, India

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Abstract

Objective: To measure the patients expectations towards orthodontic treatment.

Materials and Methods: A questionnaire was designed, developed and distributed to 175 subjects aged between 12-25 years which they completed before their initial appointment. Interaction with the patient’s belief, fulfillment of their wishes with the appearance of face, age group, sex were examined. A re-test was again conducted to interviewed and then distributed to 22 subjects who completed the questionnaire before their initial appointment for which a valid and mean analysis was done. The variable of age and gender were explored.

Result: The questionnaire gave a clear idea of the patients mainly expect from their orthodontic treatment, which is very useful in improving the quality of the treatment and treatment planning and also their expectations.

Conclusion: The study lay out with a reasonable and well determined to know the belief of the patients.

Key words: patient’s expectation, orthodontic treatment, questionnaire, estimation.

Introduction

Gratification of life has become progressively important in day to day life. Now-a-days the quality of treatment is very important and at the same time should satisfy the patient. Now Orthodontic treatment has been considered as a way for patients to attain a good and acceptable facial appearance within the social environment. Health related gratified condition of life has become progressively predominant researchers have recognized that established sequel to estimate are minimal attention to the actual individual are involved in the present well being condition1. There are more ways to evaluate the management of oral health management and the outcome in the following situations2.

- Clinical study
- Patient care should be monitored regularly.
- Make a better interaction with doctor-patient.
- Between ill health differentiation
- Assessment of disparate procedure of organizing and capitalize system for health care management. Carr et al suggested a prototype, clinician are believed to be request for the efficacy of management and systematic funds use of resource3 and Nature of life which is related to health can be estimated by three problems, firstly the patients have individual expectations, secondly, patients will be at dissimilar levels in their ailment and thirdly, patients beliefs will make extra time4.

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It is generally accepted that focuses on the impact of health on a person’s ability to live a fulfilling life included a number of domains for example

- Physical status
- Psychological
- Social interactions
- Economic
- Religion

Research paper revealed that numerous dental orthopedics cases are young one and youngster there may be some drawback to employ the satisfaction of life related to health. More difficulties are faced by youngster patient due experienced important changes and it is complicated to ascertain those changes due to orthodontic management. Further researches have mostly concentrated on the utility and not the observation with dental orthopedics management. Rarely interviewed and the dental orthopedics management. Several other researches are not too involved a valid along with reliable to analyses their rate these consideration are major to rigor in addition to lessen the discrimination. When the patient gets treated there may be some positive experience and some negative experience. When there are negative experiences, we should settle down their belief make them from negative to positive. Some of the studies have concentrated on determinants which will encourage the patient go through or The questionnaires used to measure patients expectations required further psychometric evaluations. Rarely interviewed and the dental orthopedics appliances, make uneasy or assumed the time period for dental orthopedics management. A sound and definitive plan for patients extend with irrational impossible belief is thoughtful in successful orthodontic management, setting an agreement standard of service assigned an Orthodontic treatment has been a most sought after treatment now-a-days since patients come to get a better facial appearance and in other cases to improve their ability in speech and eating habits.

The general appearance of patients during their treatment is also discussed here. Many patients during their treatment found it difficult to interact in public, due to wearing braces of different types. Some of the types of braces are head braces, train track braces etc. Now-a-days many other methods have been found for the patients to have an acceptable appearance like lingual braces, or wearing braces which are tooth colored.

The main aim of this study is to measure the patient’s satisfaction with orthodontic treatment and to preliminarily assess its validity. It is done in questionnaire study in order to get a clear idea of the patients expectations who come for orthodontic treatment. It is done to investigate and correlate between the satisfaction with the patient’s facial and dental appearance and its expectations. The effects of age and gender are explored along with various other important factors. The correlation were variant over gender and age group. The result was come to an end that fulfilment with dental aspect is significant predictor of orthodontic patient’s belief of their management.

**Material and Methods**

A sample size of 175 subjects was taken and the questionnaire was distributed to the patients from various dental clinics in Chennai. The research was done on age and gender as well. But they are distributed to a certain criteria.

Criteria:

- New patients conferring to the dental orthopedics health center.
- Case age group into 12-25 years.
- Patient did not give a past history of orthodontic management.

**QUESTIONNAIRE CONSTRUCTION**

First a questionnaire was prepared based on the research done and what the patients expect by doing a few interviews with the patient’s who come to the clinic for orthodontic treatment. The qualitative evaluation was planned and complete succeeding the requirement for qualitative analysis. These administered question were planned to enquire the patients about their belief of orthodontic management, concerning their aids and sustained. The main factor upon which the questions were asked is the ‘general’ and ‘dental’ appearance of the patient after the treatment is over. The questionnaire was constructed in the Yes / No format regarding their beliefs of the first consultation, sort of management,
predicted issues are correlation with the management of time period, duration for complete the treatment, the number of dental visits during that and most importantly the benefits. The questionnaire also deals with other people’s reaction to the patients wearing braces as it is one of the most important factor now-a-days. The questionnaire was constructed in the Yes / No format as it is very easy for the patient to fill and get their opinion. It is then evaluated using kappa to know the value of this study. The mean analysis is also done for the same. After the questionnaire is filled it is recorded. The use of Yes / No format, Likert scale and Visual Analogue Scale have been used in a number of studies.

**Questionnaire Distribution**

The questionnaire was administered to 175 subjects with an age range of 12-25 years old. The standard schedule was drawn to finishing the questionnaire was nearly 5-10 minutes. The data was later analyzed using an experimental study and represented. The first time the questionnaire was distributed to them before their initial appointment and later a re-test was conducted for about 22 subjects after their treatment to compare the patient’s response between the two studies and to reduce operator bias. The Research varies according to the patient’s age and gender correlation between the patient’s expectations and their facial appearance.

Although only a few studies were made to evaluate the patient’s expectation of orthodontic treatment, we present data from the questionnaire that illustrates how many patients react positive to the treatment and the duration. Data were analyzed using mean and value analysis. The patient were asked to fill the questionnaire before their initial appointment and then the questionnaire was again distributed to 22 subjects who have completed their treatment for reliability.

**Results**

An overall of 175 people take part in their research throughout the time period of September 2011 to January 2012. The findings from the questionnaire was analyzed. The association was ascertained the female are considering more to undergo orthodontic treatment than males. Around 15 subjects participated in the construction of the questionnaire. The content of the analysis are such as their first consultation, sort of management, problems associated with the treatment, the response of the individuals to the patients issues with the treatment, the duration, the number of dental visits and most importantly the benefits from the treatment. The regularity of everyone topic along with sub topic is

<table>
<thead>
<tr>
<th>Reactions of wearing Braces</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative reaction</td>
<td>69</td>
<td>39.4</td>
<td>39.4</td>
<td>39.4</td>
</tr>
<tr>
<td>No reaction</td>
<td>79</td>
<td>44</td>
<td>44</td>
<td>83.4</td>
</tr>
<tr>
<td>Positive reaction</td>
<td>27</td>
<td>14.3</td>
<td>14.3</td>
<td>97.7</td>
</tr>
<tr>
<td>Total</td>
<td>175</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

From the above table (Table 1) it is said that about 39.4% of the people would give a negative reaction to the patients wearing braces, while about 44% of the people have said they would give no reaction and while about 14.3% of the patients said that they would give positive reaction.
<table>
<thead>
<tr>
<th>Tenure of Orthodontic Treatment</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 years</td>
<td>9</td>
<td>5.1</td>
<td>5.1</td>
<td>5.1</td>
</tr>
<tr>
<td>3.5 years</td>
<td>17</td>
<td>9.7</td>
<td>9.7</td>
<td>14.9</td>
</tr>
<tr>
<td>3 years</td>
<td>22</td>
<td>12.6</td>
<td>12.6</td>
<td>27.4</td>
</tr>
<tr>
<td>2.5 years</td>
<td>8</td>
<td>4.6</td>
<td>4.6</td>
<td>32</td>
</tr>
<tr>
<td>2 years</td>
<td>24</td>
<td>13.7</td>
<td>13.7</td>
<td>45.7</td>
</tr>
<tr>
<td>1.5 years</td>
<td>31</td>
<td>17.7</td>
<td>17.7</td>
<td>63.4</td>
</tr>
<tr>
<td>1 year</td>
<td>49</td>
<td>28</td>
<td>28</td>
<td>91.4</td>
</tr>
<tr>
<td>6 months</td>
<td>4</td>
<td>2.3</td>
<td>2.3</td>
<td>93.7</td>
</tr>
<tr>
<td>Don’t know</td>
<td>11</td>
<td>6.3</td>
<td>6.3</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>175</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

From the above, we see that according to the level of illness the duration of the treatment might be varied. In which most of them suggest that it will be around 6 months at the least. (Table 2)

Table 3. FREQUENCY OF DENTAL CHECK-UP NEEDS

<table>
<thead>
<tr>
<th>Frequency of Dental Check-up needs</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>once every month-1</td>
<td>91</td>
<td>52</td>
<td>52</td>
<td>52</td>
</tr>
<tr>
<td>once every 2 months-2</td>
<td>42</td>
<td>24</td>
<td>24</td>
<td>76</td>
</tr>
<tr>
<td>once every 3 months-3</td>
<td>29</td>
<td>16.6</td>
<td>16.6</td>
<td>92.6</td>
</tr>
<tr>
<td>once every 6 months-4</td>
<td>13</td>
<td>7.4</td>
<td>7.4</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>175</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

From the above, we see that frequency of Dental Check-up needs at different level of month. It was found that they have to visit the clinic every month. (Table 3)
**Discussion**

Questionnaire can be utilized in a comprehensive surrounding to collect the details about the attitude and performance of the consumer. The questionnaire was written from the attitude of the contributor. However, the details that was gathered tends to be arguable and deceptive. Patient based questionnaire are progressively utilized in Randomized Controlled Trial to assess new management and also take part of an audit. As supplemental branch of science the strength and effective of the measurement tool i.e. questionnaire need to be exactly try out that the data collected is meaningful. Previous study have manifested that the individuals are more distinctly to reacted to questionnaire that cover the problems that are relevant to them. During the analysis it is found that most of the patients in their early stages who took the questionnaire didn’t think that they would get braces fitted in their initial appointment. There was a slight level of agreement of patient’s getting their teeth extracted, having x-rays taken, diagnosis and impression taken while only few people say that they would get a surgery done. Most of the patient say that they think that wearing braces would be painful and restrict their intake in food and drinks. The reaction of other people to them wearing braces is also measured. From the given research done it is found that around 44% have said that they would not give any reaction to the patient’s in wearing brace, while only 14.3% have said that they would give a positive reaction. Hence in order to eliminate those factors a number of ways have been introduced, like tooth colored braces or lingual braces, although lingual braces are still under research.

But the result which the patients expect after their treatment is very high. The main goal after finishing the treatment is that the patients to have their teeth aligned and straight which gives a better smile and make communication in the social environment easier as well as to eat and drink. Some people say that that also can also improve their chances for a better career. And for the frequency of visiting the dental clinic is that most patients took that they had to visit it once every month. The duration of the treatment they thought it would take was around a year.

An interviewed was organized to assure its quality of being dependable utilizing a numerical analysis are suggested recently. Validity was tested using kappa to assess the value of the questionnaire. Its main assessment was measuring device estimates what it focus to estimates.

Weakness of the study was found that mean and value are threatened by bias and errors. They are measures using kappa and hence measure the accurate significance could not be given. The robustness could not be given, since little size tryout –inspection. This study requires a questionnaire which measures the expectations of the patients before their management and also factors like the time period of management duration of the treatment, frequency of orthodontic appointment.

The questionnaire has recorded the patients high and low belief of their orthodontic management and their early beliefs. The statistical analysis used to confirm can be questioned even though it is supported by literature. Application of the questionnaire is that it is used to assess the expectation and requirement of the patient. It is also useful for permission and management planning. All these factors help to improve the quality of the treatment and give the required expectation of the patient.

**Conclusion**

This study layout the following:

- A definitive quantify of the patients expectation when they undergo orthodontic treatment
- It gives a clear idea of what the patient expects before the treatment like what they will do, sort of management, predicted involvements during the management, time period, appearance of visits and the utilizing from their management.

**Ethical Clearance**- Obtained from department of public health dentistry

**Conflict of Interest**- Nil

**Funding**- Nil

**References**


