

Teenage Patients And Their Parent’s Expectations- A Questionnaire Based Study

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Abstract

Introduction

The feature that is noticed on the first encounter is, smile. Second being the eyes. Smile forms an important part of an individual’s appearance. The desire to look good and fulfill the social norms of appearance and peer pressure could be one of the several reasons inspiring the patients to undergo orthodontic treatment at an early age. Today aesthetics is more relevant a reason for orthodontic treatment than ever. The need for orthodontic treatment has been showing a marked rise since its inception. A patient doctor relationship is essential to understand patient expectations. It all begins with patients education. A more dentally aware patient can have healthy attitude towards his or her oral health, also it guides realistic expectations from the outcome of orthodontic management. Hence the need to understand the patient and the parent’s expectations is vital to our treatment planning. This motivated us to carry out our study.

Most orthodontic patients are in their teens. Adolescence is an impressionable period. Children grow into adulthood and try to fit into their social circles. They are under constant social and cultural influences. Acceptance of their friends and colleagues reflects on the confidence they

carry. Gender also plays a role in the patient attitude and cooperation. Girls have a higher tendency to be conscious of their appearances. The social pressures on women to appear perfect could have a role in this tendency . Quality of life is an important part of the evaluation of treatment outcomes and has been defined as ‘the discrepancy between our expectation and our experience’. Quality of care and quality of life are strongly associated with malocclusion and its treatment.

Method and Materiology

Objective of the present study was to evaluate and compare the extent and mode of orthodontic awareness, identify their inhibitions and compare them between parents and their children. The Sample consisted of total 80 individuals, 40 in each group. The Group A included patients, aged 12–19 years. Group B were parents or guardians of the respective patients. Patient presenting to the department with no history of orthodontic treatment were approached. A written consent was obtained from both the child and the parent or guardian in written form. The sample consisted of 80 participants who were referred to our dental college and hospital , for orthodontic treatment. An age group of 12- 19 years was selected to study the difference in expectations in early and late teens.

One parent or guardian of respective patient was also invited to participate before the beginning of the first appointment. Each participant was given the questionnaire to complete. Same questionnaire were answered by both the groups. For statistical analysis we used Chi square test and Mann Whitney U test. The questionnaire was selected based on, similar studies carried in Netherlands and North Karnataka . Some questions were added based on common doubts and misconceptions of patients observed over a period of one year, in our department. Parents and The questions were as follows –

1. At your initial appointment do you expect to:
 - A. Have a brace fitted?

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
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- B. Have a check up and diagnosis?

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
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- C. Have a discussion about treatment?

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
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2. What type of orthodontic treatment do you expect?

- A. Removable?

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
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- B. Fixed?

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
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- C. Teeth extraction / removal?

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
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- D. Jaw surgery?

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
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guardians should be a good source of dental information. To evaluate the knowledge and expectations of adults, the group B was dedicated to the respective parent or guardian of each patient from the group A. The questionnaire was explained in languages, including, English, Hindi and Marathi. All the subjects were interviewed by the same examiner. The questions were answered on a survey form along with written consent. On average each individual took 10-12 minutes. The subjects were exposed to the questions only once.

E .Invisible braces?

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
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3. Do you expect orthodontic treatment to affect your speech?

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
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4. Do you think wearing a brace will be painful?

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
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5. Do you expect orthodontic treatment to restrict what you eat or drink?

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
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6. How do you think people will react to you wearing a brace?

Definite positive	Positive	Undecided	Negative	Definite negative
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7. Why do you want to undergo braces treatment?

- Teeth are forwardly placed
- Teeth have spaces
- Teeth are not in a straight line or ,not in level
- Teeth are behind
- None of the above

8. How long do you expect orthodontic treatment to take?

- Less than 1 year
- 1- 1.5 years
- 1.6-2 years
- 2- 3 years
- More than 3 years
- Don't know

9. . How often do you think you will need to come for check up?

- < 1 month
- 1-2 months >2-3 months
- >3-6 months
- >6 months
- Don't know

10. Do you expect orthodontic treatment to:

A. Straighten your teeth?

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
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B. Produce a better smile?

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
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C. Make it easier to eat?

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
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D. Make it easier to speak?

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
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E. Make it easier to keep your teeth clean?

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
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F. to which extent do you expect to your facial appearance to change after the successful completion of treatment.

Completely change	No change	Minimal change
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11. Are you aware that after the braces removal, there will be a period of retainer (removable braces)that have to be worn, that will help the treatment effects?

Yes	No
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1. Now that you are told about a period of removable brace after your fixed braces are removed are you willing to cooperate during that period and wear the appliance regularly?

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
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2. Do you think this treatment will help you find a better acceptance in you peer group?

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
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14. Do you think this treatment completion will help you find a better job or career opportunity?

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
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15. How did you come to know about braces treatment?

- Friends
- Internet
- Posters or pamphlets
- Dentist
- None of the above

Results

Majority of the study participants agreed when asked whether they expect braces fitted (35%), check-up and diagnosis (52.5%) or discussion about treatment (52.5%) at the initial appointment. When asked regarding the type of orthodontic treatment expected, majority of the study participants agreed on fixed braces (43.8%). Most of the people expected straightening of teeth (70%), produce a better smile (72.5%), Make it easier to eat (70%), Make it easier to speak (75%) and Make it easier to keep your teeth clean (63.7%). Participants expected a better acceptance in peer group (28.7%) and completion will help in finding a better job or career opportunity (41.3%) [Table 1]. When the mean scores of responses were compared between the groups, there was a statistically significant difference seen when asked regarding discussion about treatment at the initial appointment [Table 2]. Forwardly placed teeth (46.3) was the most common reason behind the desire to undergo orthodontic treatment. Also, 42.5% of the study participants expected orthodontic treatment to take less than 1 year and 33.8% think they would need to come once in less than 1 month for check up. 68.8% of the study participants were aware that after the brace removal, there will be a period of retainer (removable braces) that have to be worn, that will help the treatment effects. Majority of the study participants came to know about braces treatment through dentist (41.3%) followed by friends (31.3%). There was no statistically significant difference seen when the responses from both the groups were compared. When the responses regarding expectance of facial appearance to change after the successful completion of treatment among both the groups were compared 45% of group A and 37.5% of Group B expected complete change. [Figure 1] When the responses regarding expectance of facial appearance to change after the successful completion of treatment

among both the genders were compared 33.3% of males and 46% of females expected complete change. [Figure 2] When the mean scores of responses were compared between both the genders the response was same for most questions. a statistically significant difference seen when asked regarding type of orthodontic treatment as jaw surgery. [Table 3] When the mean scores of responses were compared between both the genders in Group A and Group B, there was a statistically significant difference seen when asked regarding have a check up and diagnosis at the initial appointment. [Table 4&5] When the response number was compared between both the groups and between genders among each group, there was no statistically significant difference when asked regarding the reason for their braces treatment and expectation from duration of treatment & frequency of checkups. [Table 6&7].

Discussion

Orthodontic treatment begins the day the patient sees his or her orthodontist the first time. The initial consultation has a significant role in the patient doctor relationship. It will also help the patient express his expectations from the treatment. Quality of life in treatment is the gap between the service provided and expected. According to Carr's model on quality of life, it means different things to different people; firstly, people have different expectations. Secondly, people are at different stages in their illness. Thirdly, people's expectations change with time. The accurate prediction of demand for orthodontic treatment requires an understanding of the factors which influence their reach for orthodontic treatment. Quality of life [QOL] can be used to assess the quality of service, the need for health care, the effectiveness of interventions, and in cost utility analyses. Their use reflects how patients feel and how satisfied they are with treatment in addition to the traditional focus on disease outcomes. Carr

discourages questionnaire format since a single questionnaire may not fairly assess the QOL individually. Average orthodontic period is 1.5 years for mild to moderate complex cases. In the present study we found that most under estimated the number of days required to carry out the study. Only 28% individuals knew the right duration of treatment. Whereas 42.5% thought it would take less than a year. Today, children are relatively more aware of their malocclusions and orthodontic arrangement. Espeland et al tested teenagers before and after orthodontic treatment with study models and photo graphs. Pre treatment phase they were totally aware of the malocclusions and the need to undergo the treatment. Post treatment they could identify their corrected malocclusions. Trulsson et al, the teenagers insisted that it was their individual desire to undergo the treatment and not as much as the peer's. Their motivation were social norms and beauty culture in there reference groups. Similarly we also found that only 28.7% of our subjects felt it would lead to improved peer acceptance. There are different means of patient education like newspaper, TV, radio, internet, etc. Most of patients were referred to us from word of mouth. Even today, word of mouth forms a leading means of advertisement and orthodontic awareness. According to Wezel et al, today the patients have greater orthodontic expectations. Anderson et al, carried a pre and post questionnaire study for 12 year old students in Australia. The study group was shown patient education video. This statistically resulted in a 15 per cent gain in orthodontic knowledge. Also an increase in potential compliance and positive attitude to the appearance of orthodontic appliances. In the present study we found that the parents and the patients had similar knowledge and expectations from the orthodontic treatment. In a similar study, Sayers et al in London found that patients and their parents have similar

expectations except, the duration of treatment and dietary restrictions. We found that the parents were expecting discussion about the treatment on the first appointment significantly more than their children. More Sari et al, measured the anxiety level in patients and their parents. The average age of the patients was 15 years. They concluded that the anxiety level in both the patients' and parents were high. But after a year the patients had lower stress, while the parents still had a high anxiety levels. Personal information forms and Spielberger's 'State and Trait Anxiety Inventory' (STAI) were applied to both groups. One way of avoiding such levels would be improving communication with the patients and their parent. We found that males and females had similar knowledge and expectations from the treatment. Except the females statistically less reluctant of surgical treatment [p 0.01] than the males, similar to the results obtained by Hiemstra et al. Our study showed no difference between males and females or the parents and the patients with respect to knowledge of retention post orthodontic treatment. In Molloy et al's questionnaire study, patients who believed that they were responsible for the retention of orthodontic treatment were significantly more satisfied with their treatment, than the ones who believed they weren't responsible. Also, clear, invisible retainer users were statistically very satisfied than those wearing Hawley's. Also Hawley's retainers showed higher probability of discontinuation than invisible aligners. 3 orthodontists using the Aesthetic Component (AC) scale of the Index of Orthodontic Treatment Need (IOTN-AC) tried to assess the influence of orthodontic treatment on the psychosocial impact of dental esthetics and its improvement after orthodontic treatment among adolescent orthodontic patients. They found that the treatment resulted in positively improving patients psychological well-being attributes (self-esteem, general

body image, and negative affect) and the clinical indicators (orthodontists' rating on the IOTN-AC) at baseline. It only reemphasizes the need in psychological research in orthodontics. Similarly, we found that 72 % agreed that they expect to improve their smile after treatment. It was reported that approximately 1 in 7 subjects rated his or her dental esthetics less favorably than it would appear to be.

Conclusion

The result of the study brought to light many unscientific inhibitions of parents and young children regarding orthodontic treatment. Male patients had greater reluctance to accept jaw surgeries while patients were less aware of the steps involved before orthodontic treatment begins. We concluded that general dentist and orthodontist play a very important role in giving the right information to the masses. Orthodontic treatment despite having progressed leaps and bounds is still a mystery to the public. A right educational strategy may help reach out to more people and create awareness.

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Legends Table and Figures

Table 1: Distribution of the study participant according to their response							
Question			Response				
			Strongly disagree	Disagree	Un-decided	Agree	Strongly Agree
At your initial appointment do you expect to:	Have a brace fitted?	n	0	30	11	28	11
		%	0.0	37.5	13.8	35.0	13.8
	Have a check up and diagnosis?	n	2	3	23	42	10
		%	2.5	3.8	28.7	52.5	12.5
	Have a discussion about treatment?	n	0	12	11	42	15
		%	0.0	15.0	13.8	52.5	18.8
What type of orthodontic treatment do you expect?	Removable	n	5	14	25	30	6
		%	6.3	17.5	31.3	37.5	7.5
	Fixed	n	0	14	22	35	9
		%	0.0	17.5	27.5	43.8	11.3
	Teeth extraction/removal	n	7	27	25	19	2
		%	8.8	33.8	31.3	23.8	2.5
	Jaw surgery	n	20	32	15	13	80
		%	25.0	40.0	18.8	16.3	100.0
	Invisible braces	n	2	11	31	28	8
		%	2.5	13.8	38.8	35.0	10.0
	Do you expect orthodontic treatment to affect your speech?	n	4	30	12	30	4
		%	5.0	37.5	15.0	37.5	5.0
Do you think wearing a brace will be painful?	n	3	20	23	30	4	
	%	3.8	25.0	28.7	37.5	5.0	
Do you expect orthodontic treatment to restrict what you eat or drink?	n	4	29	22	23	2	
	%	5.0	36.3	27.5	28.7	2.5	
Do you expect orthodontic treatment to:	Straighten your teeth?	n	0	5	9	56	10
		%	0.0	6.3	11.3	70.0	12.5
	Produce a better smile?	n	0	3	2	58	17
		%	0.0	3.8	2.5	72.5	21.3
	Make it easier to eat?	n	0	2	11	56	11
		%	0.0	2.5	13.8	70.0	13.8
	Make it easier to speak?	n	0	2	8	60	10
		%	0.0	2.5	10.0	75.0	12.5

	Make it easier to keep your teeth clean?	n	0	3	9	51	17
		%	0.0	3.8	11.3	63.7	21.3
Now that you are told about a period of removable brace after your fixed braces are removed are you willing to cooperate during that period and wear the appliance regularly		n	1	3	8	54	14
		%	1.3	3.8	10.0	67.5	17.5
Do you think this treatment will help you find a better acceptance in you peer group?		n	19	9	19	10	23
		%	23.8	11.3	23.8	12.5	28.7
Do you think this treatment completion will help you find a better job or career opportunity?		n	12	25	2	8	33
		%	15.0	31.3	2.5	10.0	41.3

Table 2: Comparison of the mean scores for both the groups

Questions		Groups				Z [#]	p
		Group A		Group B			
		Mean	SD	Mean	SD		
At your initial appointment do you expect to:	Have a brace fitted?	3.30	1.114	3.20	1.114	-0.406	0.68
	Have a check up and diagnosis?	3.70	.823	3.68	.859	-0.206	0.83
	Have a discussion about treatment?	4.05	.714	3.45	1.037	-2.736	0.00* Significant
What type of orthodontic treatment do you expect?	Removable	3.30	.966	3.15	1.099	-0.539	0.59
	Fixed	3.45	.783	3.53	1.037	-0.485	0.62
	Teeth extraction/removal	2.90	1.008	2.65	.975	-1.291	0.19
	Jaw surgery	2.20	1.091	2.33	.944	-0.716	0.47
	Invisible braces	3.32	.944	3.40	.928	-0.34	0.73
Do you expect orthodontic treatment to affect your speech?		3.18	1.107	2.83	1.035	-1.45	0.14
Do you think wearing a brace will be painful?		3.08	.944	3.23	1.025	-0.803	0.42
Do you expect orthodontic		3.03	1.000	2.73	.933	-1.56	0.11

treatment to restrict what you eat or drink?							
How do you think people will react to you wearing a brace?		3.15	.864	3.05	.846	-0.423	0.67
Do you expect orthodontic treatment to:	Straighten your teeth?	3.95	.597	3.83	.781	-0.512	0.60
	Produce a better smile?	4.02	.620	4.20	.608	-1.356	0.17
	Make it easier to eat?	3.83	.675	4.08	.526	-1.674	0.09
	Make it easier to speak?	3.93	.572	4.03	.577	-1.123	0.21
	Make it easier to keep your teeth clean?	4.05	.677	4.00	.716	-0.225	0.82
Now that you are told about a period of removable brace after your fixed braces are removed are you willing to cooperate during that period and wear the appliance regularly		3.93	.764	4.00	.716	-0.412	0.68
Do you think this treatment will help you find a better acceptance in you peer group?		3.20	1.506	3.02	1.577	-0.485	0.62
Do you think this treatment completion will help you find a better job or career opportunity?		3.48	1.536	3.15	1.688	-0.900	0.36
#Mann Whitney U test, *Statistically significant, p<0.05							

Table 3: Comparison of the mean scores for both the gender

Questions		Gender				Z [#]	p
		Males		Females			
		Mean	SD	Mean	SD		
At your initial appointment do you expect to:	Have a brace fitted?	3.20	1.064	3.28	1.144	-0.304	0.76
	Have a check up and diagnosis?	3.67	.884	3.70	.814	-0.13	0.89
	Have a discussion about treatment?	3.67	.994	3.80	.904	-0.487	0.62
What type of orthodontic treatment do you expect?	Removable	3.33	.922	3.16	1.095	-0.614	0.53
	Fixed	3.63	.890	3.40	.926	-1.133	0.25
	Teeth extraction/removal	2.67	1.061	2.84	.955	-0.54	0.58
	Jaw surgery	1.87	.629	2.50	1.129	-2.43	0.01* Significant
	Invisible braces	3.40	1.003	3.34	.895	-0.026	0.97
Do you expect orthodontic treatment to affect your speech?		3.07	1.048	2.96	1.106	-0.44	0.65
Do you think wearing a brace will be painful?		3.17	.874	3.14	1.050	-0.21	0.98
Do you expect orthodontic treatment to restrict what you eat or drink?		2.87	.973	2.88	.982	-0.06	0.95
How do you think people will react to you wearing a brace?		2.97	.809	3.18	.873	-1.04	0.29
Do you expect orthodontic treatment to:	Straighten your teeth?	3.80	.887	3.94	.550	-0.375	0.70
	Produce a better smile?	4.03	.669	4.16	.584	-0.732	0.46
	Make it easier to eat?	3.80	.714	4.04	.533	-1.440	0.15
	Make it easier to speak?	3.97	.669	3.98	.515	0.000	1.000
	Make it easier to	3.97	.809	4.06	.620	-0.337	0.73

	keep your teeth clean?						
Now that you are told about a period of removable brace after your fixed braces are removed are you willing to cooperate during that period and wear the appliance regularly		3.97	.809	3.96	.699		-0.408 0.68
Do you think this treatment will help you find a better acceptance in you peer group?		2.80	1.495	3.30	1.542		-1.405 0.16
Do you think this treatment completion will help you find a better job or career opportunity?		3.13	1.655	3.42	1.592		-0.604 0.54

#Mann Whitney U test, *Statistically significant, p<0.05

Table 4: Comparison of the mean scores gender wise (Group A)

Questions		Gender				Z [#]	p
		Males		Females			
		Mean	SD	Mean	SD		
At your initial appointment do you expect to:	Have a brace fitted?	3.00	1.414	3.33	1.155	-0.576	0.60
	Have a check up and diagnosis?	4.00	1.414	4.67	.577	-2.135	0.04* Significant
	Have a discussion about treatment?	4.00	.000	4.67	.577	-1.831	0.09
What type of orthodontic treatment do you expect?	Removable	3.50	2.121	3.00	1.000	-0.295	0.79
	Fixed	3.50	.707	3.33	.577	-1.795	0.09
	Teeth extraction/removal	3.50	2.121	2.67	1.528	-1.391	0.18
	Jaw surgery	2.50	2.121	1.67	1.155	-0.779	0.47
	Invisible braces	2.50	.707	3.67	.577	-1.318	0.21
Do you expect orthodontic treatment to affect your speech?		2.00	.000	3.67	1.528	-1.480	0.17
Do you think wearing a brace will		4.00	1.414	2.67	1.528	-0.985	0.36

be painful?							
Do you expect orthodontic treatment to restrict what you eat or drink?		4.00	.000	3.00	1.732	-0.954	0.37
How do you think people will react to you wearing a brace?		3.50	.707	2.67	1.155	-0.809	0.45
Do you expect orthodontic treatment to:	Straighten your teeth?	4.50	.707	4.00	.000	-0.635	0.60
	Produce a better smile?	4.50	.707	4.33	.577	-0.723	0.56
	Make it easier to eat?	4.50	.707	4.00	.000	-0.291	0.81
	Make it easier to speak?	4.50	.707	4.33	.577	-1.080	0.37
	Make it easier to keep your teeth clean?	3.00	1.414	4.67	.577	-1.243	0.26
Now that you are told about a period of removable brace after your fixed braces are removed are you willing to cooperate during that period and wear the appliance regularly		4.00	1.414	4.00	1.000	-0.252	0.83
Do you think this treatment will help you find a better acceptance in you peer group?		4.00	1.414	3.67	1.528	-1.046	0.31
Do you think this treatment completion will help you find a better job or career opportunity?		3.00	1.414	2.67	2.082	0.892	0.90
#Mann Whitney U test, *Statistically significant, p<0.05							

Table 5: Comparison of the mean scores gender wise (Group B)

Questions		Gender				Z [#]	p
		Males		Females			
		Mean	SD	Mean	SD		
At your initial appointment do you expect to:	Have a brace fitted?	3.00	1.177	3.19	1.059	-0.560	0.60
	Have a check up and diagnosis?	3.43	.938	4.04	.774	-2.135	0.02* Significant
	Have a discussion about treatment?	3.36	1.082	4.00	.849	-1.831	0.09
What type of orthodontic treatment do you expect?	Removable	3.36	1.008	3.19	1.096	-0.295	0.79
	Fixed	3.21	1.122	3.81	.634	-1.795	0.09
	Teeth extraction/removal	2.36	1.082	2.81	1.132	-1.391	0.18
	Jaw surgery	1.93	1.072	2.04	.774	-0.779	0.47
	Invisible braces	3.07	.829	3.50	1.068	-1.318	0.21
Do you expect orthodontic treatment to affect your speech?		2.79	.893	3.31	1.158	-1.480	0.17
Do you think wearing a brace will be painful?		3.43	1.016	3.08	.891	-0.985	0.36
Do you expect orthodontic treatment to restrict what you eat or drink?		2.71	1.139	3.08	1.017	-0.954	0.37
How do you think people will react to you wearing a brace?		3.14	.663	2.92	.977	-0.809	0.45
Do you expect orthodontic treatment to:	Straighten your teeth?	4.00	.877	3.85	.784	-0.635	0.09
	Produce a better smile?	4.00	.679	4.12	.766	-0.723	0.05
	Make it easier to eat?	3.93	.475	3.92	.796	-0.291	0.81
	Make it easier to speak?	4.21	.426	3.96	.720	-1.080	0.37
	Make it easier to keep your teeth	3.71	.994	4.15	.732	-1.243	0.26

clean?						
Now that you are told about a period of removable brace after your fixed braces are removed are you willing to cooperate during that period and wear the appliance regularly	4.07	.475	4.00	.938	-0.252	0.83
Do you think this treatment will help you find a better acceptance in you peer group?	2.64	1.393	3.15	1.488	-1.046	0.31
Do you think this treatment completion will help you find a better job or career opportunity?	3.21	1.762	3.23	1.583	-0.135	0.90

#Mann Whitney U test, *Statistically significant, p<0.05

Table 6: Comparison of the responses among the groups

Question		Group		Chi square	p
		Group A (n)	Group B (n)		
Why do you want to undergo braces treatment?	Teeth are forwardly placed	18	19	1.152	0.88
	Teeth have spaces	0	1		
	Teeth are not in a straight line or ,not in level	17	15		
	Teeth are behind	4	4		
	None of the above	1	1		
How long do you expect orthodontic treatment to take?	Less than 1 year	16	18	3.065	0.54
	1- 1.5 years	8	11		
	1.6-2 years	3	3		
	2- 3 years	2	0		
	More than 3 years	11	8		
	Don't know	16	18		
How often do you think you will	< 1 month	14	13	2.686	0.61
	1-2 months	10	15		

need to come for check up?	>2-3 months	0	0		
	>3-6 months	3	3		
	>6 months	1	2		
	Don't know	12	7		
How did you come to know about braces treatment?	Friends	6	19	13.483	0.09
	Internet	6	3		
	posters or pamphlets	6	1		
	Dentist	20	13		
	None	2	4		
Chi square test, *Statistically significant, p<0.05					

Table 7: Comparison of the responses gender wise among the groups

Question	Group A		Chi square	p	Group A		Chi square	p	
	Males (n)	Females (n)			Males (n)	Females (n)			
Why do you want to undergo braces treatment?	Teeth are forwardly placed	6	12	1.021	0.79	11	8	2.137	0.54
	Teeth have spaces	0	0			1	0		
	Teeth are not in a straight line or ,not in level	7	10			9	6		
	Teeth are behind	1	3			2	2		
	None of the above	0	1			1	0		
How long do you expect orthodontic treatment	Less than 1 year	6	10	1.156	0.88	12	6	1.535	0.82
	1- 1.5 years	3	5			7	4		
	1.6-2 years	1	2			2	1		
	2- 3 years	0	2			0	0		

to take?	More than 3 years	0	0			0	0		
	Don't know	4	7			3	5		
How often do you think you will need to come for check up?	< 1 month	5	9	3.087	0.54	7	6	1.836	0.76
	1-2 months	2	8			10	5		
	>2-3 months	0	0			0	0		
	>3-6 months	2	1			1	2		
	>6 months	0	1			1	1		
	Don't know	5	7			5	2		
	How did you come to know about braces treatment?	Friends	2			4	0.220		
Internet	2	4	2	1					
posters or pamphlets	2	4	0	1					
Dentist	7	13	6	7					
None	1	1	4	0					
Chi square test,*Statistically significant, p<0.05									

Figures

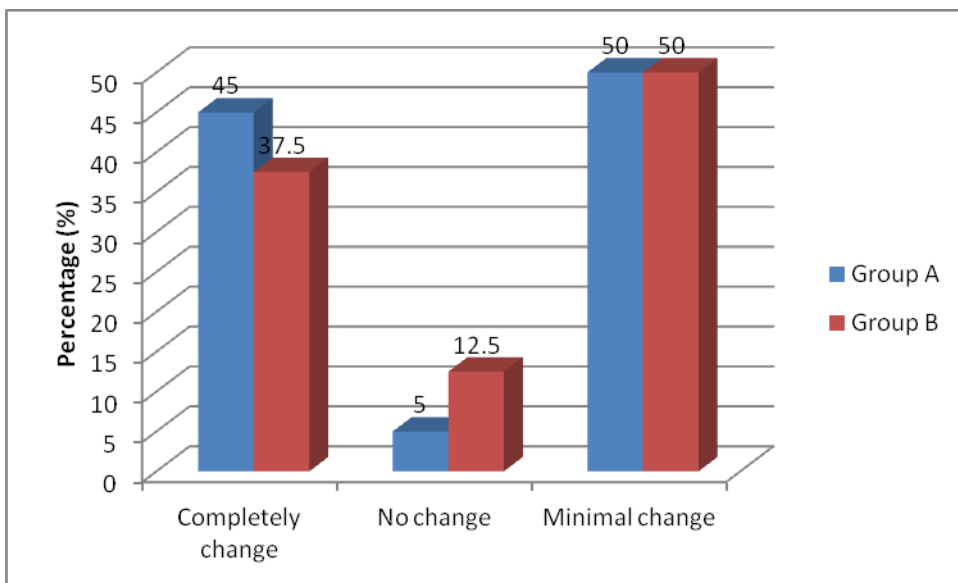


Figure 1: Comparison of responses regarding expectance of facial appearance to change after the successful completion of treatment among both the groups

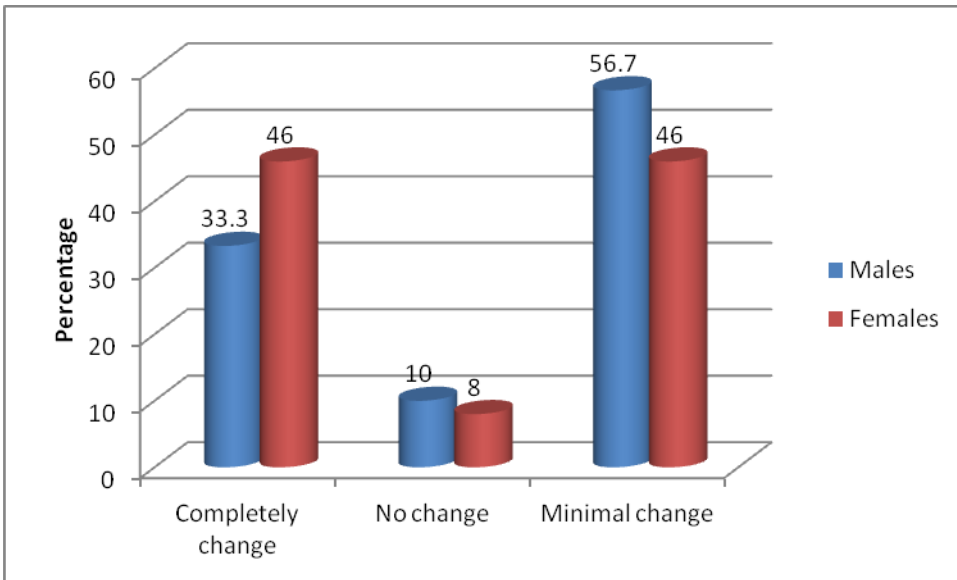


Figure 2: Comparison of responses regarding expectance of facial appearance to change after the successful completion of treatment among both the genders