



Impact of Social Media Popularity of “Do It Yourself” Orthodontic Aligners: An Online Questionnaire Based Study

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ABSTRACT: Aligner therapy is a mode of orthodontic treatment protocol where a series of invisible (transparent) removable thermoplastic plates are used. The Clear Aligner therapy concept was originated after the introduction of The Tooth Positioner (TP Orthodontics) in 1944, which was a removable appliance¹. Previously for mild to moderate tooth movements these Clear Aligners were used. This study is aimed to assess the impact of social media popularity of “Do It Yourself (DIY)” Orthodontic Aligner. It has been done through an online questionnaire based format to common people who were searching for orthodontic treatment in either an institution-based or private setup or from DIY Aligner Companies. The uploaded questionnaire generated link (<https://docs.google.com/forms>) was sent to 100 individuals of various occupations via mobile phone application (WhatsApp), emails. 91 persons responded. The responses were categorically studied to evaluate how the social media and their advertisement through famous actors / actresses / sports persons has affected the field of orthodontic treatment, also to evaluate which type of orthodontic treatment they want, why they are very interested in clear aligner therapy. They consider it is the most aesthetically acceptable, less painful and less time consuming. But due to limited information on DIY Clear Aligner, they still prefer to take Clear aligner treatment from certified Orthodontist

KEYWORDS: Social media, Do It Yourself (DIY), Clear Aligner, Orthodontic Aligner, Metal braces, Ceramic braces, Lingual braces. Instagram, Advertisement, Google search, YouTube, Facebook.

I. INTRODUCTION

Clear Aligner therapy has been a part of orthodontic practice since decades, but after the introduction of InvisalignTM in 1988, it has gained

increasing popularity amongst orthodontic treatment modalities¹. The advancement of Clear Aligner therapy increases the awareness and acceptance of orthodontic treatment in the teen and middle aged groups, greatly due to the concern about their social and professional appearance. In the last couple of years, various companies were established to provide aligners directly to the consumer rather than provide them through orthodontists^{2,3}. The popularity of “Do It Yourself” Orthodontic Aligners is increasing day by day, especially due to the advertisements on social media, google search engine⁴, YouTube and various OTT platforms. These companies promote their advertisement through famous actors/actresses/sports persons, and thus attracting a huge mass. Moreover, due to the COVID-19 pandemic, people have shifted to a home based treatment/remedy strategy rather than visiting a dentist for consultations.

II. MATERIALS AND METHODS

The study was carried out with a web-based questionnaire using Google Forms (Impact of Social Media Popularity of “Do It Yourself” Orthodontic Aligners - Google Forms). The target group was common people who were searching for orthodontic treatment in either an institution-based or private setup or from DIY Aligner Companies. The questionnaire was structured into two sections. The first section contained personal information and the second section had the relevant questions with multiple answers to choose from and also options to provide their own opinions. The questionnaire [Table 1] was evaluated and validated by an experienced orthodontist to check whether the questions effectively captured the purpose of the study. The questionnaire was uploaded to the website and the generated link was sent to 100 individuals of various occupations via mobile phone application (WhatsApp), emails. Out



of 100 individuals to whom the form was sent, 91 persons responded. Responses were received over a period of 1 week. This being an open voluntary questionnaire, answers to all the questions were mandatory. Respondents were able to change their answers or even choose multiple answers, if they wished to, before submitting the form. Detailed information was provided in the description bar of the 1st section of the form about the nature and aim of the study; that it would take 3-5 minutes to complete and all the responses will be confidential.

Informed consent was obtained if the respondents proceeded to the 2nd part of the form containing the questionnaire. For data protection, no sign-in process was required from the respondents. Only the author had access to the collected data. For analysis of the data, responses were automatically linked to a spreadsheet on Google Sheets which was downloaded to Microsoft Excel. The responses were also automatically summarized in chart and graph form in Google Forms.

Table 1: List of Questionnaire for the Study

SL.NO.	QUESTIONNAIRE
1	What will be your choice if you want to undergo orthodontic treatment ?
2	According to you which one would you like to pick if you need orthodontic treatment?
3	Which will you find aesthetically more acceptable ?
4	From where did you gain interest and information regarding Clear Aligner ?
5	According to you who is more concerned for seeking Clear Aligner as an Orthodontic Treatment?
6	From where would you prefer to take the Clear Aligner treatment?
7	What do you expect from Clear Aligner Treatment?
8	Do you think Clear Aligner Therapy is less painful & take less time than conventional orthodontic treatment with braces?
9	Do you think DIY Clear Aligners are more economical than Clear Aligners provided by certified Orthodontist?
10	Would you like to take the risk of spending money for DIY Clear Aligner Treatment after getting information from other sources without taking expert(Orthodontist) opinion?

III.RESULTS AND OBSERVATIONS

A total of 91 persons responded to the to the study. By analyzing the responses, the data obtained showed that the people belonging to the age group in between 20 to 30 are more interested for clear

aligner treatments [Figure 1]. Out of all the responses 59.3% was female and was 40.7% male [Figure 2]. Responses were gathered from a variety of professionals. [Figure 3]



Figure 1

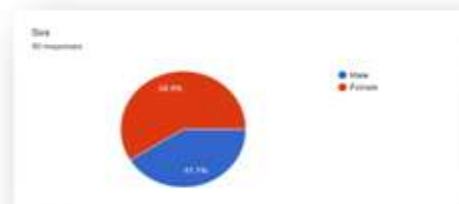


Figure 2

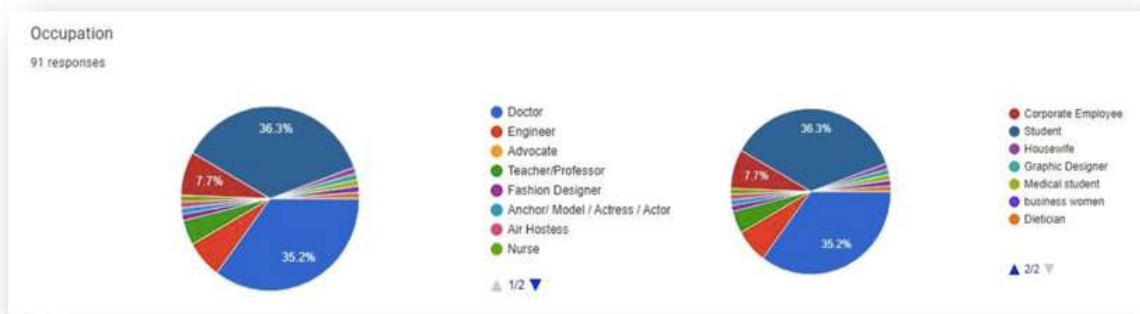


Figure 3

Most of the responder (86.8%) were willing to visit a dentist / orthodontist for consultation. 9.9 % were willing to ask friends and family for the references, whereas 1.1% were willing to get in touch with

DIY aligner providers directly. Another 1.1% responders wanted to consult orthodontist if they had severe problems, or else opt for DIY aligners. [Figure 4]

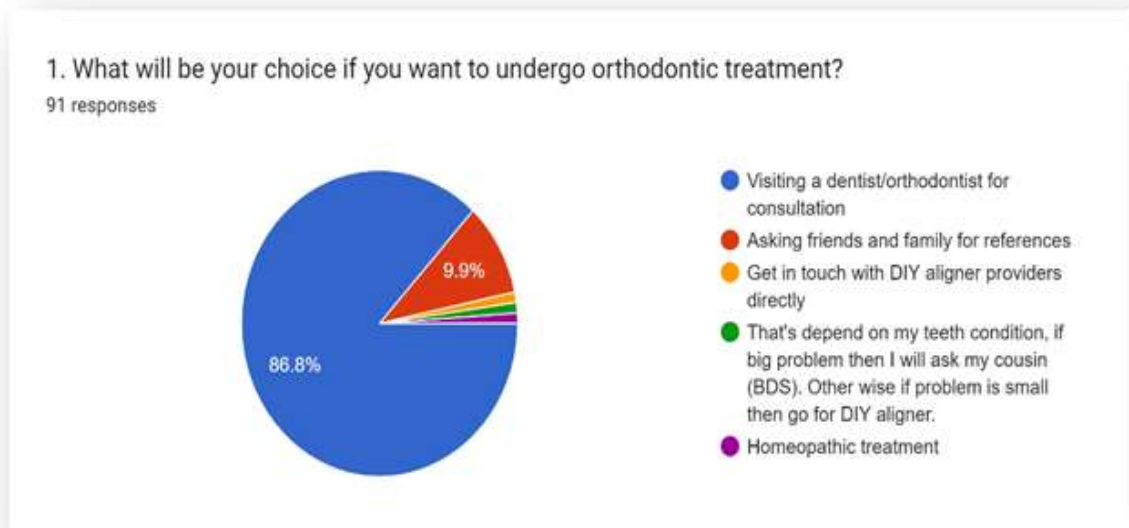


Figure 4

Out of the all responses, 54.9% opted for clear aligner treatment, 19.8% wanted ceramic bracket,

16.5% wanted metal bracket while 8.8% opted for lingual bracket. [Figure 5]

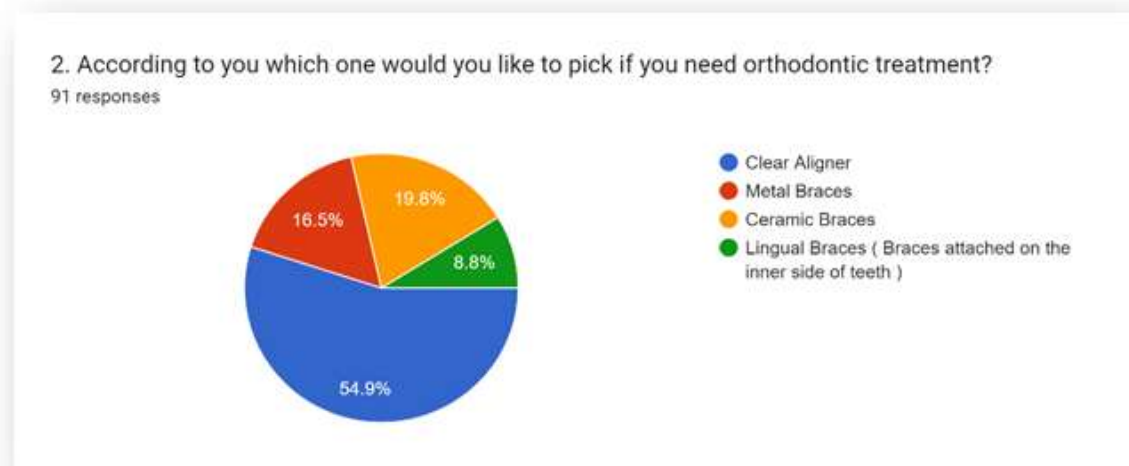


Figure 5



70.3% of responders found clear aligner treatment aesthetically most acceptable, followed by ceramic braces (19.8%), followed by metal braces (9.9%).

Lingual braces (8.8%) were least accepted. [Figure 6]

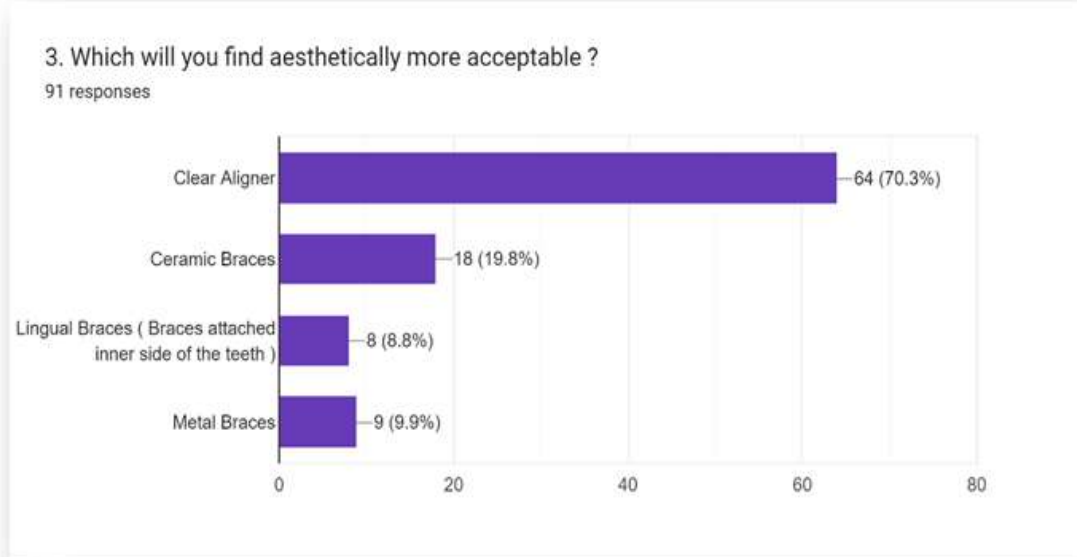


Figure 6

Majority of responders (60.4%) gained information and interest from Orthodontist / dentist. Remaining 39.6% gained information from social media, search engine, advertisement.

(Instagram 27.5%, Advertisement 10.9%, Google search 19.8%, YouTube 17.6 %, Facebook 16.5%) [Figure 7]

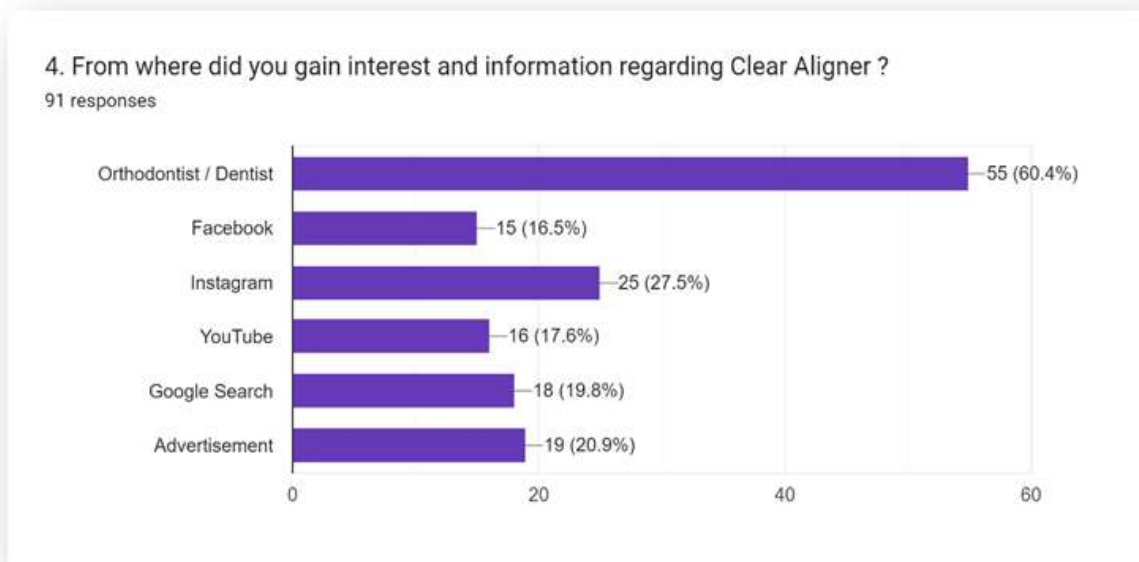


Figure 7

54.9% of responder find that both male and female are equally concerned for seeking clear aligner as an Orthodontic Treatment. Remaining

38.5% find females are more concerned for seeking clear aligner treatment. [Figure 8]

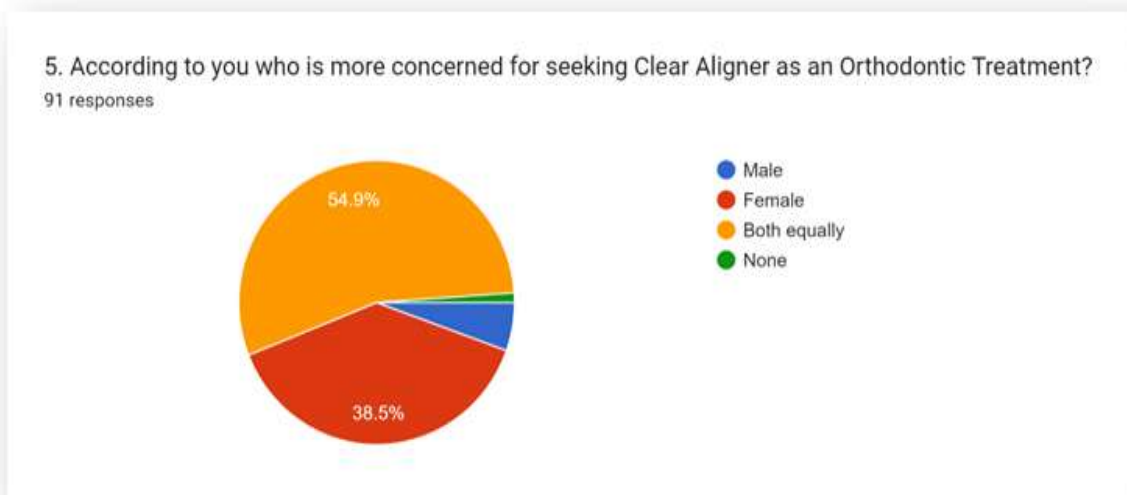


Figure 8

Most of the responders (96.7%) were willing to take Clear Aligner treatment from certified orthodontist who provide aligner for treatment. Surprisingly only 3.3% responders are

willing to take Clear Aligner treatment from online vendors without any consultation with orthodontist.[Figure 9]

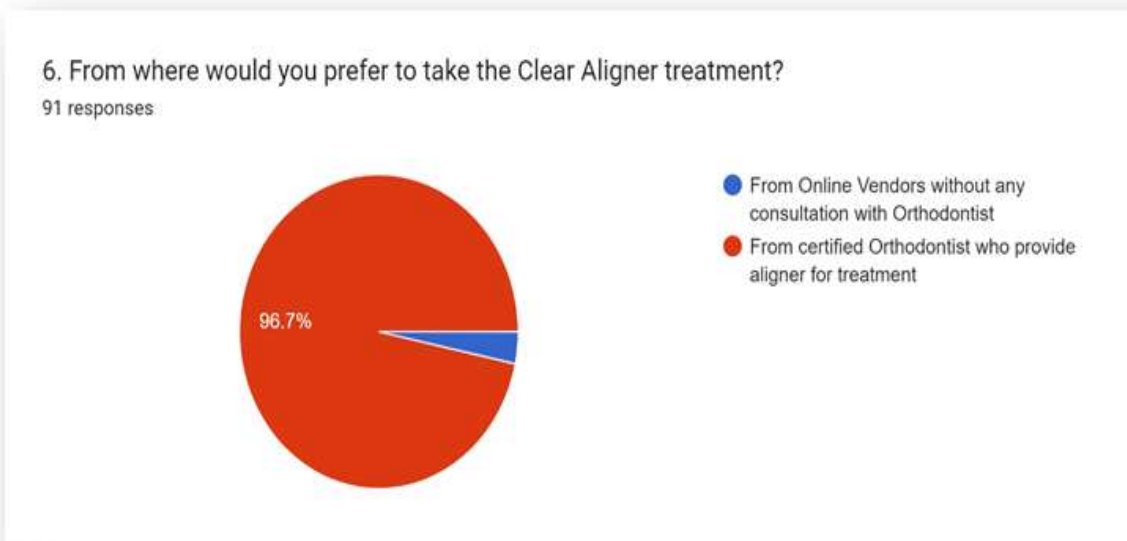


Figure 9

Most of the responders (60.4%) are willing to take the treatment with expectation of correction of both alignment of teeth and correction

of his/her facial appearance. 29.7% just expect the correction of alignment of teeth.[Figure 10]

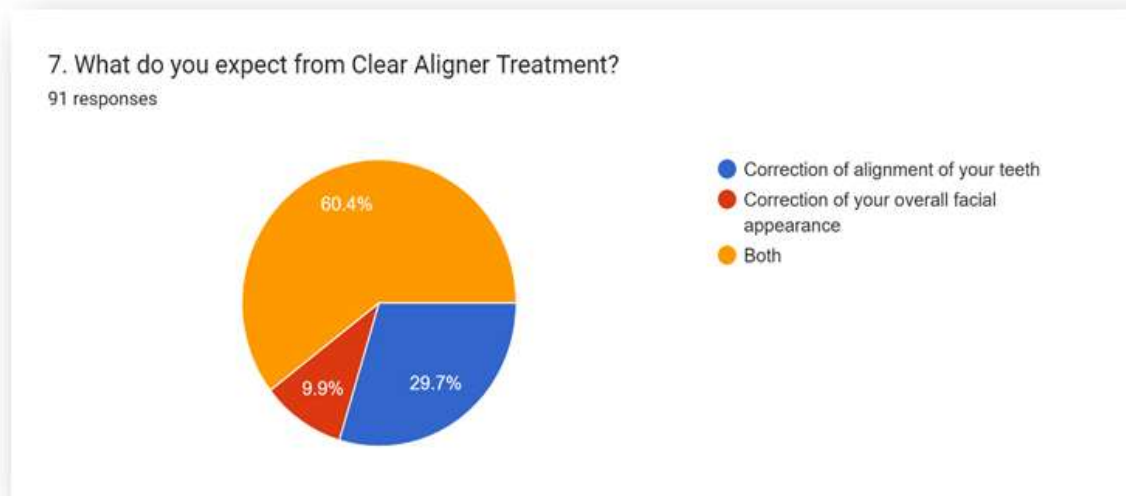


Figure 10

Among all of the responders, 53.8% think that Clear Aligner therapy is less painful and time consuming than conventional orthodontic treatment with braces. Whereas 38.5% think that it might be,

they have no definite idea regarding that. Remaining 7.7% of responders think that the pain will be more or less same as compared to conventional orthodontic treatment.[Figure 11]

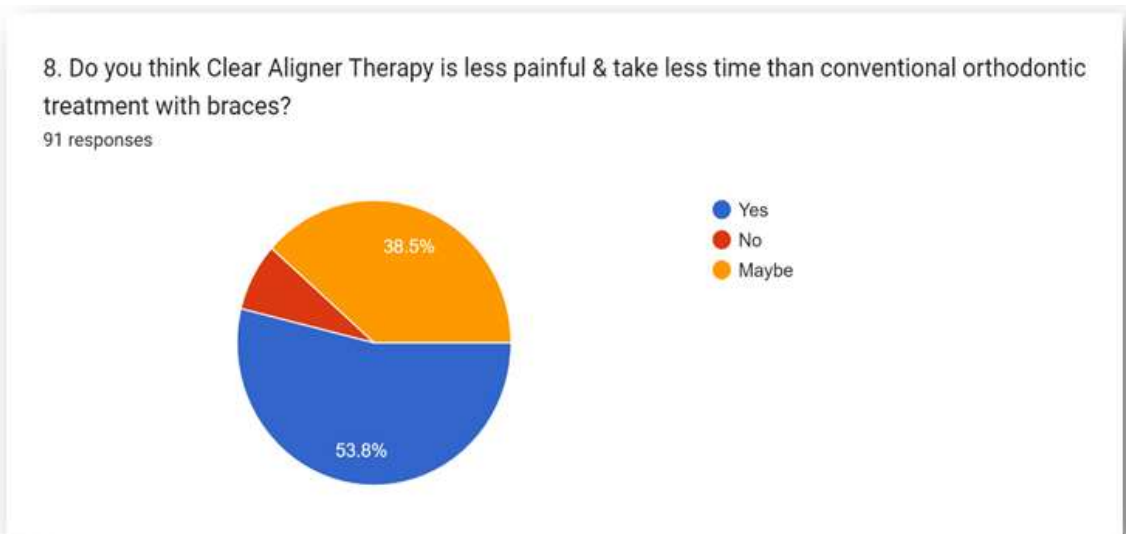


Figure 11

44% of the responders have no clear idea regarding cost effectiveness, as they thought that DIY Clear Aligner might be more economical than the Clear Aligner provided by certified Orthodontist. 29.7% responders think that it is

definitely cheaper in case of DIY Clear Aligners. 26.4% responders think that DIY Aligners are not economical than Clear Aligners provided by certified Orthodontist.[Figure 12]

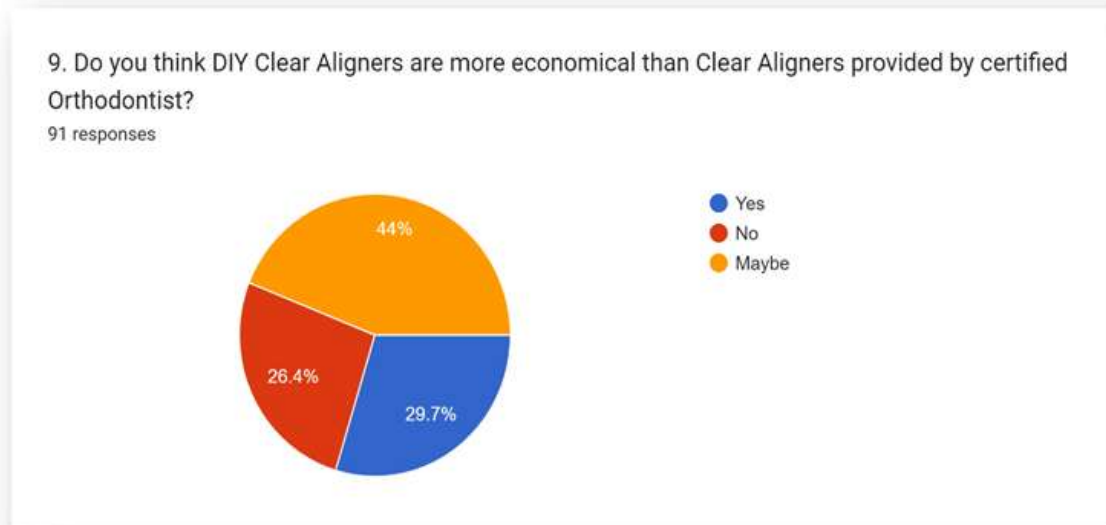


Figure 12

Majority of responder (68.1%) were not willing to take the risk of spending money for DIY Clear Aligner treatment after getting information from various sources without taking Orthodontist's

opinion. 15.4% responders are not sure that what they should do. But remaining 16.5% responder are willing to take the risk to spend money for DIY Clear Aligner. [Figure 13]

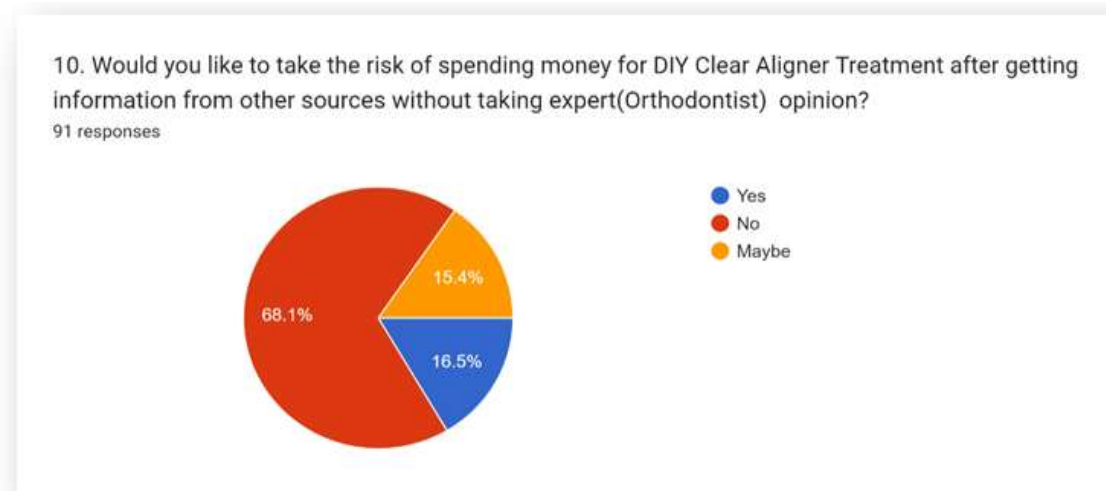


Figure 13

IV. DISCUSSION

Clear Aligner therapy has become a common addition to the orthodontic treatment modality. There are very few studies on impact of social media popularity of Do It Yourself (DIY) Clear Aligners. Among the few, Wexler et al (2020)³ observed in their study that many responders opted for DTC (Direct To Consumer) aligners due to cost and convenience, although many responders would have preferred traditional treatment from an orthodontist. In our study we

found that responders preferred to visit to a dentist or orthodontist if they need orthodontic treatment rather than get in touch with DIY Aligner Providers directly, which positively correlate with the study carried out by Wexler et al (2020). Sycińska-Dziarnowska et al (2022)⁵ observed the increased interest in "Invisalign" queries in the three most developed countries of the European Union. In our study responders still prefer to take Clear aligner treatment from certified Orthodontist. Majority of responders think that Clear Aligner therapy is the most aesthetically acceptable, less painful and take



less time. However, they are not sure whether it will be more economical or not⁶.39.6% of responders gained information from social media, search engine, advertisement, (Instagram 27.5%, Advertisement, 10.9%, Google search 19.8%, YouTube 17.6 %, Facebook 16.5%) which is significantly high.

V. CONCLUSION

The popularity of “Do It Yourself” Orthodontic Aligners is increasing day by day, especially due to the advertisements that are shown on social media, google search engine, youtube and various OTT platforms. The other main reason for its popularity is that, they consider it is the most aesthetically acceptable, less painful and less time consuming. But due to limited information on DIY Clear Aligner, they still prefer to take Clear aligner treatment from certified Orthodontist and don't want to take risk of spending money for DIY Clear Aligner treatment.

REFERENCES

- [1]. Weir T. Clear aligners in orthodontic treatment. *Aust Dent J.* 2017;62Suppl 1:58-62.
- [2]. Carter A, Stokes S. Availability of 'Do-It-Yourself' orthodontics in the United Kingdom. *J Orthod.* 2022;49(1):83-88
- [3]. Wexler A, Nagappan A, Beswerchij A, Choi R. Direct-to-consumer orthodontics: surveying the user experience. *J Am Dent Assoc.* 2020;151(8):625-636.e4.
- [4]. Meade MJ, Dreyer CW. Web-based information on orthodontic clear aligners: a qualitative and readability assessment. *Aust Dent J.* 2020;65(3):225-232.
- [5]. Sycińska-Dziarnowska M, Szyszka-Sommerfeld L, Woźniak K, Lindauer SJ, Spagnuolo G. Predicting Interest in Orthodontic Aligners: A Google Trends Data Analysis. *Int J Environ Res Public Health.* 2022;19(5):3105.
- [6]. Padmanabhan, Sridevi. (2016). Do it Yourself Orthodontics: Alarmist or Real?. *Journal of Indian Orthodontic Society.* 50. 137-138.