

 <p>ISSN NO. 2320-5407</p>	<p>Journal Homepage: - <a href="http://www.journalijar.com">www.journalijar.com</a></p> <h2 style="text-align: center;">INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)</h2> <p style="text-align: center;">Article DOI: 10.21474/IJAR01/4016 DOI URL: <a href="http://dx.doi.org/10.21474/IJAR01/4016">http://dx.doi.org/10.21474/IJAR01/4016</a></p>	 <p>INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR) ISSN 2320-5407 Journal homepage: <a href="http://www.journalijar.com">http://www.journalijar.com</a> Journal DOI: 10.21474/IJAR01</p>
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### RESEARCH ARTICLE

#### AWARENESS AND KNOWLEDGE ABOUT IMPLANTS IN COMPLETE DENTURE: PATIENT'S SURVEY.

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#### Manuscript Info

##### Manuscript History

Received: 19 February 2017  
Final Accepted: 09 March 2017  
Published: April 2017

##### Key words:-

dental implant, complete denture,  
awareness and knowledge

#### Abstract

**Aim:** The purpose of this study was to evaluate the patients' knowledge on dental implants in complete denture.

**Methodology:** Patients' knowledge and awareness in using dental implants as an option in complete denture were evaluated through a standardized self-explanatory questionnaire distributed in Dental colleges. The questionnaires were handed to the patients during their regular dental visits. A total of 100 subjects were included in this survey.

**Result:** 58% of patients were not aware of implants and more than 70% of them were hesitant to consider implants for replacement of missing teeth as they felt it was too costly.

**Conclusion:** Most of the patients did not have a clear idea about implant therapy which emphasizes the need to educate them

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#### Introduction:-

Dental implant is an artificial root that is surgically inserted into the jawbone to support a single tooth replacement, fixed partial, complete denture or maxillofacial prosthesis [1]. Dental implant treatment has come into focus, since it provides excellent long term results in rehabilitation of partially or completely edentulous patients [2]. Replacement of missing teeth using implant-supported prostheses for esthetic and functional rehabilitation has become an accepted and widely used treatment approach in dentistry [3]. The perspectives of the public about dental implants are less known. Several studies have been conducted to show the patients' awareness about oral implants in different countries [4]. The treatment of edentulism with traditional removable dentures is less accepted due to many factors like anatomical, physiological, psychological and also prosthodontic factors like it can often induce impaired masticatory function due to limited retention and stability, especially in the lower jaw [5].

However, with the advent of new technology, more restorative options have become available, thereby changing the demand for prosthodontic treatment. Implant treatment has come into focus since this treatment option has provided excellent long term results by increased retention, stability, functional efficiency and quality of life [6]. Recently, it has become the focus of the patient's interest hence for dentist, it is vital to assess their level of knowledge with regards to dental implants and whether their perception of dental implants does in fact reflect reality in order to guide patients who do not have the education or background knowledge to make an informed decision between

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implant supported dentures and removable dentures. Overall aspiration for improved oral health related quality of life has become a truth after the arrival of dental implants. Replacement of missing teeth with implant supported prosthesis has been accepted and rated as a positive experience by patients who have undergone implant treatment [7]. Many studies have been done in different parts of the world with regards to the awareness of dental implants as a treatment option. A majority of patients with severely compromised local host bone can be offered implant-supported rehabilitation with a very good prognosis and improved esthetics, phonetics and function. Thus, the aim of the study was to assess the awareness of the patients regarding implant-retained complete denture and the source of information and attitude towards it.

### Methodology:-

The study was conducted during the academic year in December 2016 among patients who were visiting dental hospitals. The patients who were present at the day of the particular study and were willing to participate were included in the study and those who were not willing to participate were excluded.

### Study Sample Size:-

The descriptive cross sectional hospital study was based among 100 adult male and female patients who attended outpatient dental clinics. Participants were selected at random and the questionnaires were used to assess their knowledge, attitude and acceptance of Dental implant as treatment option in complete denture.

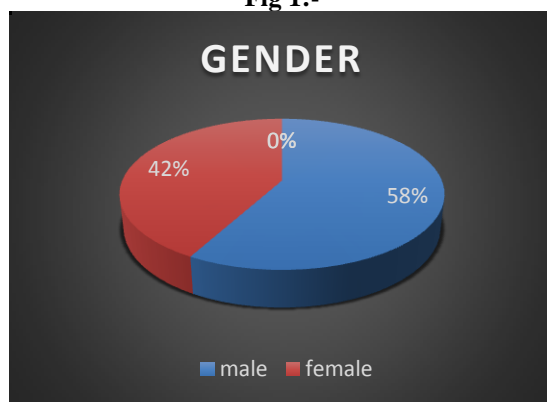
### Questionnaire:-

The questionnaire was not targeted at a specific group but at all the patients in general to assess their knowledge and awareness about implants. A validated questionnaire was distributed among all the patients participating in the study. This included questions about the awareness on the prevalence of dental implants, the patient's knowledge of dental implants and how they learnt about it, various questions about implant awareness and implant site. The questions were based on simple answers that the subjects could answer easily by choosing any of the options given accordingly. The data extracted were tabulated and statistically analyzed.

### Results:-

Out of 100 subjects, 42% female and 58% male (fig: -1) with the mean age of 42.2 years. When the subjects were asked if they were aware of implants, 58% of the subjects were not aware of implants and the other 42% were aware through their dentists, media and various other modalities (fig:2 & 3). The subjects were also asked about the site of placement of implants and about 55% of the people were not aware of the implant site and 26% of the subject identified the site of implant as the jaw bone, while some answered as gum tissue (fig: -4). More than 70% of them interviewed felt implants to be too costly for considering as a replacement option for missing teeth (fig: -5). Among the subjects that had missing teeth, 43% have replaced by using removable partial dentures, 22% replaced by using fixed partial dentures, 2% of the subjects are undergoing or completed treatment involving implants and about 33% have opted not to replace their missing teeth. About 62% were aware of fixed partial denture and removable complete denture. More 60% preferred complete denture with implant, 78% believed that the lifelong of implants of about 10 years and more.

Fig 1:-



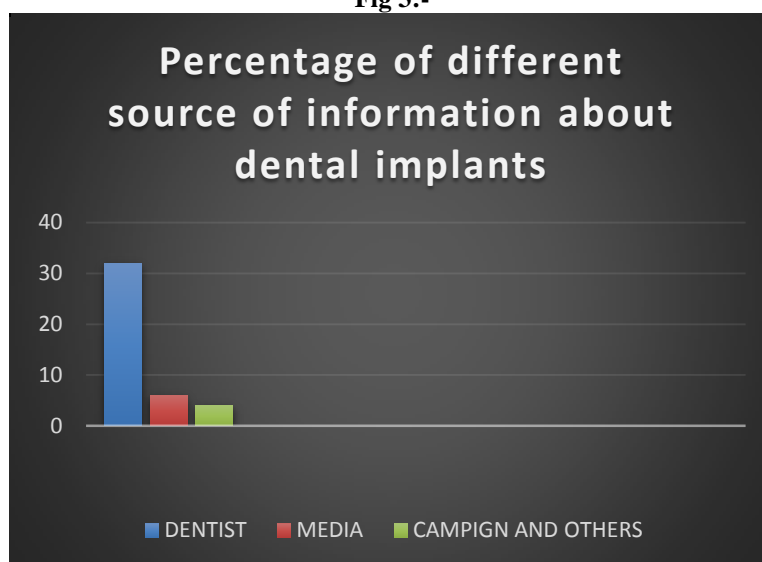
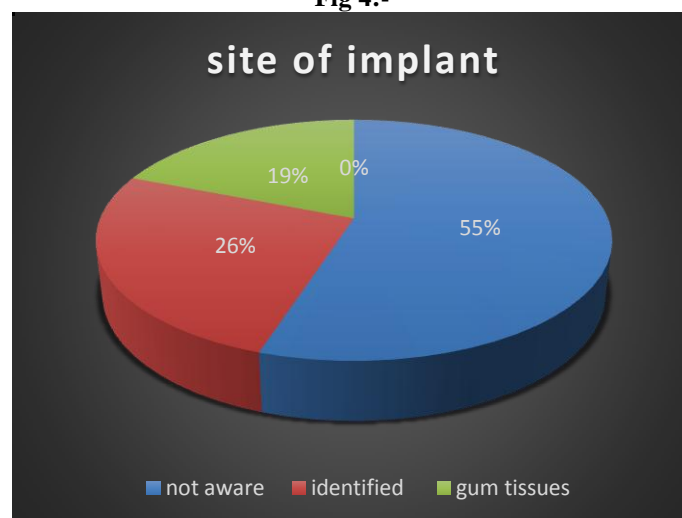
**Fig: 2:-****Fig 3:-****Fig 4:-**

Fig:-5:-

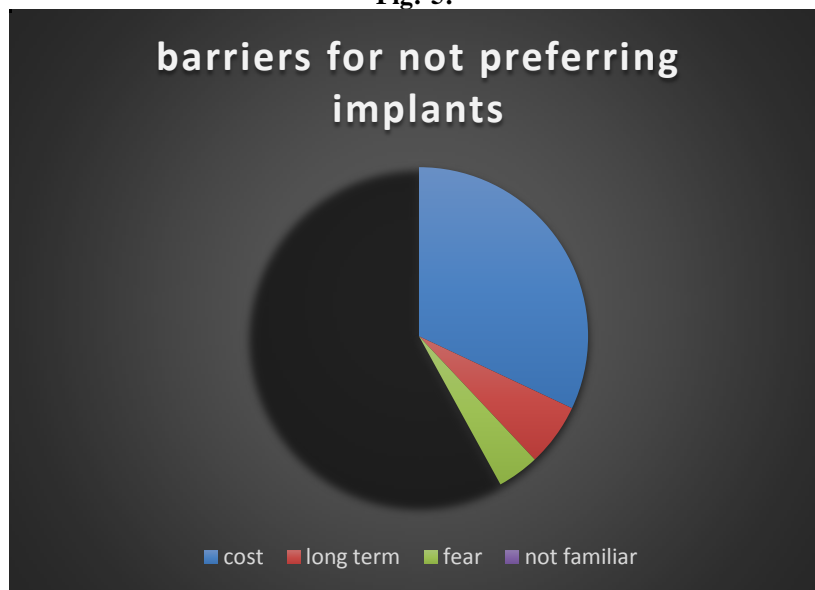
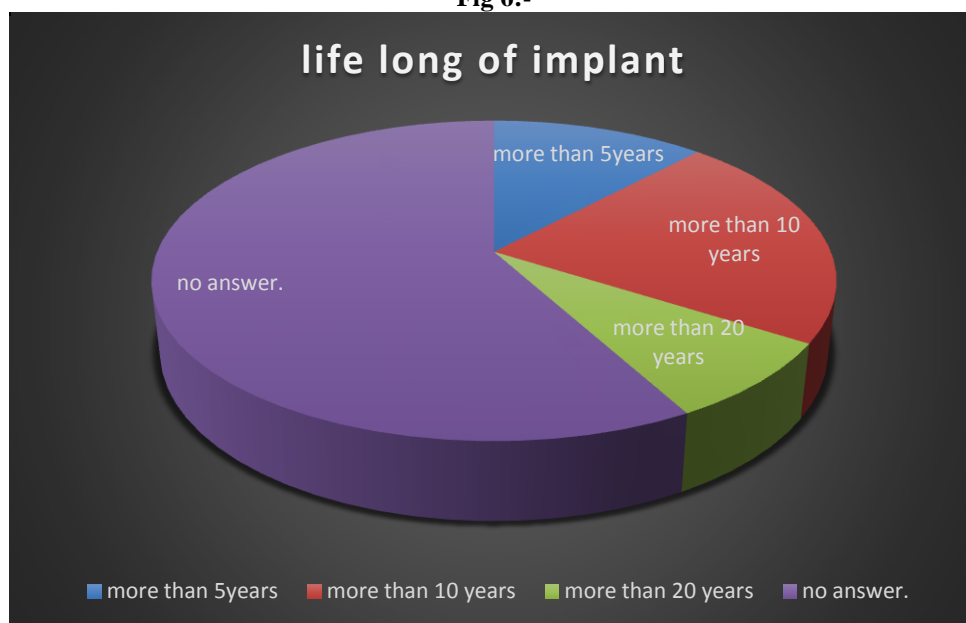


Fig 6:-



### Discussion:-

The present survey gives information about subjects' knowledge and their need for more information related to dental implants as an option in complete denture in a selected sample of dental patients. This specific group sample was selected for ease of access and to increase the response rate as they are dental patients who were approached during their regular dental visits. Due to the limited access to the female patients, the responses of the females to the survey were less. The age distribution was chosen randomly. The perspective and outlook of the south Indian population towards dental implants are less known. So, our study was done to assess the level of knowledge about dental implants among patients. Several studies have been conducted to show the patients' awareness about implants in different countries. Chawdhary et al. [8] reported that the level of awareness of implant treatment was 23.24% in 2010. Zimmer et al. in 1992 [9] demonstrated a high awareness rate as well as general positive attitude toward oral implant therapy. Within the limitations of this study, it can be concluded that 42% of the population have heard of dental implant treatment. This survey among patients attending dental college showed that the many of the patients

were unaware about dental implants as an option for replacing missing teeth. In a study done in Turkey [10] showed that a subpopulation in Istanbul have limited awareness about dental implants in accordance to our study. In another study, only 33% of patients had heard of implant therapy. [11] In contrary in a study done on Malaysian population 76% of people were aware of dental implants. [12] 32% of people in our study said dentists were the main sources of information regarding dental implants amongst other sources. This is in agreement with Satpathy et al.[13] Mukatash et al.[14] and Ravi Kumar et al.[15] all of which stated dentists as the main source of information. This evidently indicates the lack of efforts by dentists and the governing bodies regarding taking necessary steps for creating awareness amongst the people. The high cost of the implants is one of the major limiting factors working against the willingness of patients to undergo this treatment. It also shows that most patients felt dental implants treatment to be expensive and unaffordable, but they were interested to know more about dental implants. It the main duty of the dentist and health organization to create awareness and knowledge among patients so, that they will have a wide range of option to select for their treatment.

### Conclusion:-

It concludes that most of the subjects found implants treatment to be expensive and unaffordable one of the major factor against the willingness of patients to undergo this treatment. But still they were interested to know implants. Awareness among the participants was less than fifty percent and dentists were the main sources of information. It also showed the need for providing more information to the patients about this treatment modality. So, proper dental education is necessary for developing positive attitude among population regarding dental implants.

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