

## Dental Patients' Awareness of Dental Implants as a Treatment Modality: A Survey Based Study at College of Dentistry, AlJouf University

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### ABSTRACT

**Aim:** To assess the awareness and level of knowledge about dental implants as a treatment option for replacing missing teeth among the patients attending the College of Dentistry, AlJouf University.

**Material and Methods:** This cross sectional survey based study was carried out among 268 patients attending the College of Dentistry, AlJouf University using a self-explanatory questionnaire.

**Results:** Out of the 268 dental patients, 60.44% were aware about dental implants. The dentists were the main source from whom the information of implants was obtained, followed by friends/relatives, internet and other media sources. Most of the patients replied that increased cost was the main barrier which prevented them from opting dental implants as a treatment modality, followed by phobia of surgery, long duration of the therapy and lack of awareness.

**Conclusion:** The level of level of awareness about dental implants was acceptable among patients attending the College of Dentistry, AlJouf University.

**Keywords:** Missing teeth, Dental Implant, Awareness, Knowledge.

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### INTRODUCTION

The objectives of day to day dentistry is to reestablish the patient to normal function, aesthetics, speech and wellbeing.<sup>1</sup> Implants are unique because of their adeptness to accomplish these perfect objectives. Substitution of missing teeth utilizing dental implants for artful and anatomic rehabilitation has become an accustomed and broadly acclimated analysis access in dentistry.<sup>2</sup> With the advance in dental technology, there are array options to manage the patients with altered indications. Due to this improvement, patients' demands as well increases, about a lot of are generally inappropriate.<sup>3</sup> With patients' accretion appeal for implant aided prosthesis, dentists ambidextrous with implantology are faced with patients' top expectations apropos optimal artful and function.<sup>4</sup>

Currently, dental implants are broadly accustomed as a prosthetic management of absolutely or partially edentulous patients. Dental implants accept better denture retention, stability, anatomic efficiency and well-being of the patient. Implants are constituent action in a lot of the cases so complete advice on implant therapy and added other therapies have to be provided to assist the patients for accommodating in best of a lot of management option.<sup>5</sup>

Implant therapy is now considered as a more accepted treatment modality with a top success rate. Recently, it is acceptable the focus of the patients' interest, abnormally with the advice of media bloom programs.<sup>6</sup> Many studies from different regions of the world with commendations to the acquaintance of dental implants as a treatment option. An cutting majority of patients with acutely compromised bony tissues can be offered implant-supported rehabilitation with a actual good prognosis and bigger esthetics, phonetics and function.<sup>7,8</sup>

Minimal information is accessible to patients regarding the procedural details of implant therapy and its success rate. There is abridgement of apprenticeship and acquaintance amidst general population about dental implants as a treatment option for replacing missing teeth.

As per our knowledge, a very less information is existing in dental literature regarding the patients' awareness and level of knowledge regarding dental implant therapy in Kingdom of Saudi Arabia. Hence, the aim of this study was to evaluate the awareness and level of knowledge about dental implants as a treatment option for replacement of missing teeth among the patients attending the College of Dentistry, AlJouf University.

## MATERIAL AND METHODS

The present cross sectional survey based study was carried out among the patients attending the College of Dentistry, AlJouf University. Informed consent from the participants was obtained and ethical clearance was granted for this study. The information was collected using a self-explanatory questionnaire which included the questions to assess the patient's knowledge and awareness about dental implant therapy. The questionnaires were given to all the patients during their visit to the College and

patients who were unwilling to answer the questions were excluded from this study. The contents of the questionnaire were framed both in Arabic and English language and were explained to the participants wherever necessary.

The collected information was analyzed by using Microsoft Excel and descriptive statistics were carried out by Statistical Package for Social Sciences (SPSS Inc., Chicago, IL) software for Windows version 20.0.

**Table 1: Demographic data of study sample**

Variables	n	Percentage	
Gender	Male	184	68.65
	Female	82	30.59
Age range (Years)	Less than 20	106	39.55
	21 to 50	118	44.02
	51 and above	44	16.41
Education level	Primary	58	21.64
	Secondary	128	47.76
	Graduate and higher	82	30.59

**Table 2: Awareness regarding different tooth replacement options**

Tooth replacement options	n	Percentage
Removable prosthesis	183	68.28
Fixed prosthesis	174	64.92
Dental implants	162	60.44

**Table 3: Source of information for dental implants**

Source	n	Percentage
Dentist	212	79.10
Friends/Relatives	186	69.40
Internet	166	61.94
Television/Radio/News paper	142	52.47
Others	44	16.41

**Table 4: Factors preventing the patients from choosing dental implants as a treatment option**

Factors	n	Percentage
Expensive	182	67.91
Fear of Surgery	151	56.34
Long Duration of the Treatment	114	42.53
Lack of Awareness about Implant	104	38.80
Availability of services	31	11.56
Others	18	6.71

## RESULTS

**Table 1** represents the characteristics of all the participants based on their gender, age and education levels. Most were aware about removable prosthesis (68.28%), followed by fixed prosthesis (64.92%) and dental implants (60.44%) as an alternative options for the replacement of missing teeth. (Table 2)

When asked about the source of information regarding dental implants, 79.10% of the participants replied that they obtained the information from the dentist, followed by friends and relatives (69.40%), internet (61.94%) and other media resources (52.47%). (Table 3)

Table 4 shows that, around 67% of the participants replied that the economic factor was one of the major issue preventing them from opting dental implants for replacing the missing teeth, followed by phobia of surgery (56.34%), long duration of the treatment time (42.53%) and lack of awareness (38.80%).

## DISCUSSION

Dental implant therapy has been at the beginning of analytic dental convenance for over a long period. With accretion success amount of dental implant therapy, increasing number of patients are preferring dental implants as arch best for substitution of a missing teeth.<sup>9</sup> The present study was conducted to evaluate the dental patients' awareness and level of knowledge about dental implants as a treatment option for replacement of missing teeth.

In our study, 60.44% of the patients were aware about dental implant as an option in replacing missing teeth, this was marginally low when compared to the previous similar study carried out in Riyadh, Saudi Arabia and lesser than the studies from other parts of the world.<sup>10-13</sup> Kohli et al., reported that only 56% of their study participants were aware about dental implants as a treatment option, this finding was low when compared with our study.<sup>14</sup>

In the present study the dentist was the main source of information about dental implant, this observation was similar to that of Kohli et al.,<sup>14</sup> Pommer et al.,<sup>15</sup> Tomruk et al.,<sup>16</sup> Satpathy et al.,<sup>17</sup> and Ravi Kumar et al.,<sup>18</sup> Whereas Al Johany et al., found that friends and relatives were the major sources,<sup>10</sup> Zimmer et al.,<sup>11</sup> Berge<sup>19</sup> and Best<sup>20</sup> noticed that, the media was found to be the main source of information about dental implants.

When the participants were asked about the factors that may prevent them from opting dental implants, they replied that increased cost was the main reason, followed by phobia of surgery, long duration of the therapy and lack of awareness about dental implant therapy. Our findings were comparable with the results of Al Johany et al.,<sup>10</sup> Tepper et al.,<sup>13</sup> Kent et al.<sup>21</sup> Majority of the study participants reported that dental implants therapy to be expensive and unaffordable necessary steps to be implemented to reduce the cost of dental implants to a more affordable rate.

As economical factor was the capital acumen not to accept implant therapy, it is basic to highlight the patients that quality of life outweighs the cost factor of dental implant therapy. The advantages and disadvantages of various other types of treatment options should be aptly interpreted to the patients so they can accomplish an abstruse choice.

## CONCLUSION

This study showed that 40.4% of subject had information about dental implants and this information was provided to them mostly by dental professionals (25.4%). As this survey was performed in a limited population, further detailed surveys are needed to learn more about Knowledge attitude and practice of dental implant therapy.

## REFERENCES

1. Aglietta M, Siciliano VI, Zwahlen M, Brägger U, Pjetursson BE, Lang NP, et al. A systematic review of the survival and complication rates of implant supported fixed dental prostheses with cantilever extensions after an observation period of at least 5 years. *Clin Oral Impl Res.* 2009;20:441–51.
2. Salonen M.A. Assessment of states of dentures and interest in implant-retained prosthetic treatment in 55-year-old edentulous Finns. *Community Dent. Oral Epidemiol.* 1994;22(2):130–135.
3. Den Hartog L, Huddleston Slater JJ, Vissink A, Meijer HJ, Raghoobar GM. Treatment outcome of immediate, early and conventional single-tooth implants in the aesthetic zone: A systematic review to survival, bone level, soft-tissue, aesthetics and patient satisfaction. *J Clin Periodontol.* 2008;35:1073–86.
4. Adell R., Eriksson B., Lekholm U., Branemark P.I., Jemt T. Long-term follow-up study of osseointegrated implants in the treatment of totally edentulous jaws. *Int. J. Oral Maxillofac. Implants.* 1990; 5(4): 347–359.
5. De Bruyn H, Collaert B, Linden U, Bjorn AL. Patient's option and treatment outcome of fixed rehabilitation on Branemark implants. A 3-years follow-up study in private dental practices. *Clin Oral Implants Res.* 1977; 8:265–71.
6. Mericske-Stern R, Grütter L, Rösch R, Mericske E. Clinical evaluation and prosthetic complications of single tooth replacements by non-submerged implants. *Clin Oral Implants Res.* 2001; 12: 309–318.
7. Akagawa Y, Rachi Y, Matsumoto T, Tsuru H. Attitudes of removable denture patients towards dental implants. *J Prosthet Dent.* 1988; 60:362–4.

8. Vermeylen K, Collaert B, Lindén U, Björn AL, De Bruyn H. Patient satisfaction and quality of single-tooth restorations. *Clin Oral Implants Res.* 2003; 14:119–124.
9. Lambrecht JT, Cardone E, Kühl S. Status report on dental implantology in Switzerland in 2006. A cross-sectional survey. *Eur J Oral Implantol.* 2010; 3:71–4.
10. Al-Johany S, Al Zoman HA, Al Juhaini M, Al Refeai M. Dental patients' awareness and knowledge in using dental implants as an option in replacing missing teeth: A survey in Riyadh, Saudi Arabia. *Saudi Dent J.* 2010 Oct; 22(4): 183–188.
11. Zimmer CM, Zimmer WM, Williams J, Liesener J. Public awareness and acceptance of dental implants. *Int J Oral Maxillofac Implants.* 1992; 7: 228–32.
12. Berge TI. Public awareness, information source and evaluation of oral implant treatment in Norway. *Clin Oral Implants Res.* 2000; 1:401–7.
13. Tepper G., Haas R., Mailath G., Teller C., Zechner W., Watzak G. Representative marketing-oriented study on implants in the Austrian population. I. Level of information, sources of information and need for patient information. *Clin. Oral Implants Res.* 2003; 14(5):621–633.
14. Kohli S, Bhatia S, Kaur A, Rathakrishnan T. Patients awareness and attitude towards dental implants. *Indian J Dent.* 2015 Oct-Dec; 6(4): 167–171.
15. Pommer B, Zechner W, Watzak G, Ulm C, Watzek G, Tepper G. Progress and trends in patients' mindset on dental implants. I: Level of information, sources of information and need for patient information. *Clin Oral Impl Res.* 2011; 22:223–9.
16. Özçakır Tomruk C, Özkurt-Kayahan Z, Şençift K. Patients' knowledge and awareness of dental implants in a Turkish subpopulation. *J Adv Prosthodont.* 2014 Apr; 6(2): 133–137.
17. Satpathy A, Porwal A, Bhattacharya A, Sahu PK. Patient Awareness, Acceptance and perceived cost of dental implants as a treatment modality for replacement of missing Teeth: A Survey in Bhubaneswar and Cuttack. *Int J Public Health Dent.* 2011; 2:1–7.
18. Kumar RC, Pratap KV, Venkateswararao G. Dental implants as an option in replacing missing teeth: A patient awareness survey in Khamman, Andhra Pradesh. *Indian J Dent Sci.* 2011; 3:33.
19. Berge T.I. Public awareness, information sources and evaluation of oral implant treatment in Norway. *Clin. Oral Implants Res.* 2000; 11(5):401–408.
20. Best H.A. Awareness and needs of dental implants by patients in New South Wales. *Aust. Prosthodont. J.* 1993; 7:9–12.
21. Kent G. Effects of osseointegrated implants on psychological and social well-being: a literature review. *J. Prosthet. Dent.* 1992; 68(3):515–518.

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