

Original Research Article

Challenges Faced by the General Public in Receiving Dental Care in Riyadh City, Saudi Arabia; A Survey-based Study

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Introduction: Access to dental care is related to several factors and barriers, which are faced by the general public. It is important to determine and eradicate these problems in order to provide maximum dental care to the patients. **Materials and Methods:** A cross-sectional study comprising of a closed-ended survey. A total of 600 residents of Riyadh city took part in this study. Descriptive and inferential statistics were performed in order to achieve the desired results. **Results:** A total of N=600 participants filled the survey, out of which 45% were males and 55% females. 30% belonged to 18-25 years of age group, 21% to 26-35 years, 23% to 35-45 years and 25% 45+ years. As far as nationality was concerned, 95% were Saudis whereas the rest were non-Saudis. **Conclusion:** High cost of private dental care and a combination of all problems associated with lack of dental care were found to be the major barriers.

Keywords: Challenges, Saudi public, Dental care.

INTRODUCTION

There are some issues faced by the general public in Riyadh city, which include financial problems with treatments and long appointments in government hospitals. There is a lack of awareness among people to maintain routine dental clinic visits every 6 months, seeking remedies for dental problem from non-dental practitioners for example (pharmacists). Some receptionists miss understand the patient's needs and refer them to the wrong specialist. The medical insurance is not covering the whole population, for example: Saudi female widow and divorced, this is considered as a problem that affects dental care as a part of the medical group. Dental diseases are the most common health problems affecting the younger age groups among different countries. One of the problems in accessing dental care is the difficulty in searching for a good provider (National Institute of Health, 2000).

In the community, there are some people having movement disabilities listed in the difficulty with the follow up in the dental clinics (Oral health, 2000). There is lack of facilities provided to them in normal random dental clinics and this is considered to be a problem in accessing the dental care and they are always needed to be transferred to the hospital for dental treatment (Glassman & Miller, 2003).

Regarding the challenges faced by dental care, the problem is in accessing are not just affecting the lowest income people but are also affect the middle-income people in Riyadh city (Sigal, 2009). Some of the people can't afford medical or dental insurance and this is the case with most of the Saudi citizens. Most common challenges faced by the general public

in receiving dental care in Riyadh include missed appointment due to failure of reminder messages (Quinonez & Grootendorst, 2011).

Poor and minorities are the most common components of any community than other parts of the population. They seek dental emergency from non-dentists for the treatment of these problems (7-13). Moreover, they face high costs in the dental treatment, that's what causes a problem in accessing dental care (Manski et al, 2001; Health, 2003).

In our study, we aimed to deal with all these problems that affect the general public in accessing dental care in Riyadh city with successful results.

MATERIALS AND METHODS

This is a cross-sectional study, which utilized a closed-ended online constructed questionnaire. Google forms were used to design the survey, which included questions related to demographics, previous dental visits, knowledge regarding different types of dental prosthesis, knowledge about indications of dental veneers, etc. The responses were categorical in nature.

We used convenient sampling, targeting male and female Saudi adults having at least one previous dental visit. The target sample size was 600. Collected data was subjected to statistical analysis using SPSS version 19. Descriptive as well as inferential statistics will be conducted using Chi-square test with the value of significance kept under 0.05.

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AIMS OF THE STUDY

- To determine the major causes of problems faced by the patients to access dental care.
- To compare among the demographics of the sample.

INCLUSION CRITERIA

All male and female subjects were aged more than 18 years.

SAMPLE SIZE

600 residents of Riyadh city.

RESULTS

A total of N=600 participants filled the survey, out of which 45% were males and 55% females. 30% belonged to 18-25 years of age group, 22% to 26-35 years, 23% to 35-45 years and 25% 45+ years. As far as nationality was concerned, 95% were Saudis whereas the rest was non-Saudis. 27% of the participants were students, 38% were government employees

whereas 17% were private employees with 18% having no employment. Participants were also divided according to their marital status, which revealed that 39% were single, 54% were married, 5% were divorced and 2% were widowed. On the basis of income, 33% had 3000 or less, 24% had 3000-10000 and 43% had 11000 or more monthly salary. It was also observed that 84% were medically fit, whereas 7% had diabetes, 6% had blood pressure, 1% had heart disease and 2% had a blood disorder. Dental visits were recorded for each patient and it disclosed that 20% visited a dental clinic every 6 months, 33% every year, 11% every 2 years and 36% more than 2 years.

As far as the barriers to dental care were concerned, 25% reported high cost of private clinics as the major reason, 14% believed having no medical insurance and difficulty in finding a good provider were the problems, 4% blamed the lack of reminder messages for appointments, 11% had trouble with long appointments in government hospitals, merely 2% found it easier to reach non dental specialists and 30% had reported 3 or more of the above-mentioned problems.

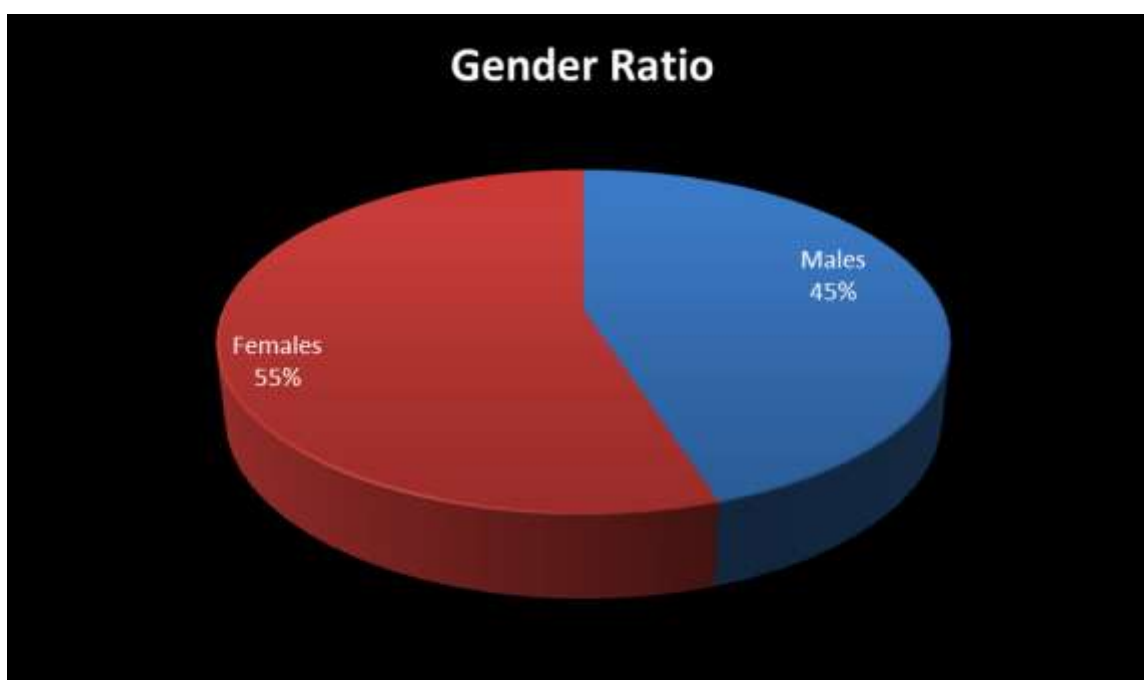


Figure 1: Gender Ratio of the study participants.

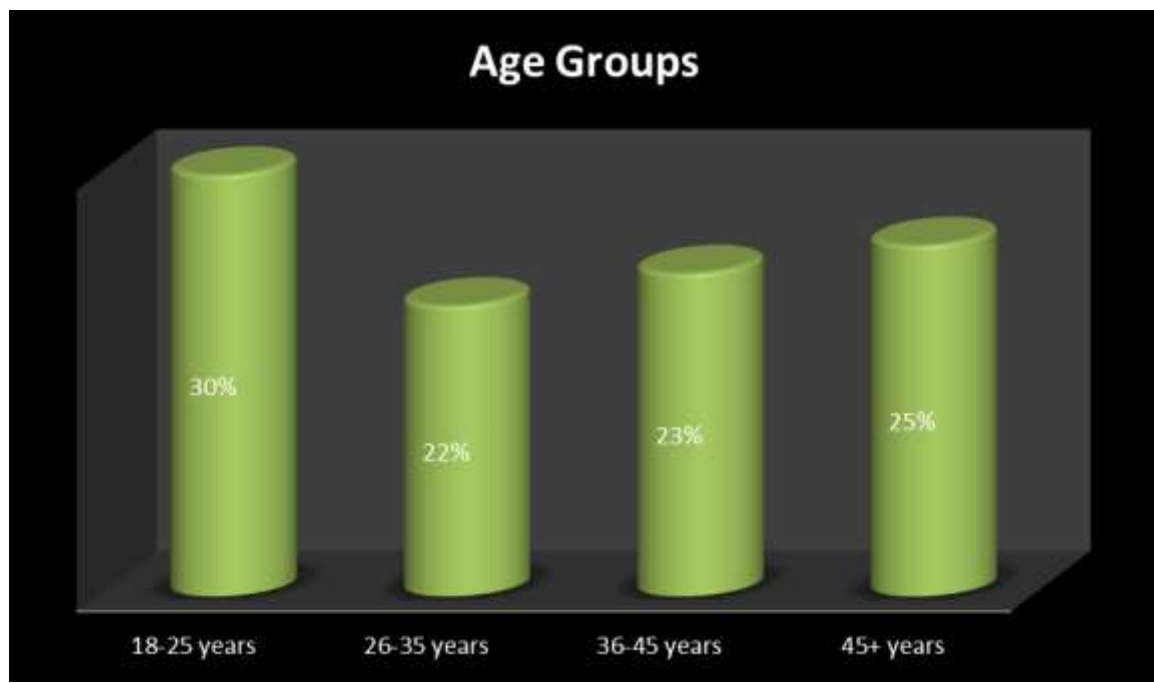


Figure 2: Age Groups distribution of the study participants.

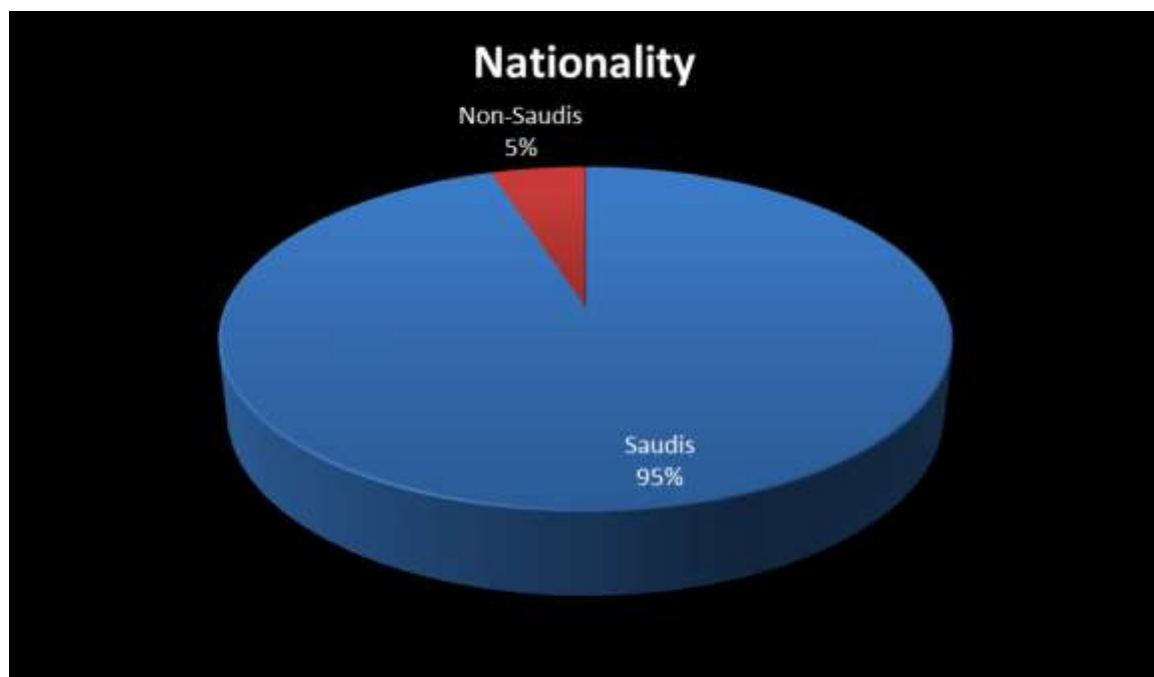


Figure 3: Nationality of the study participants.

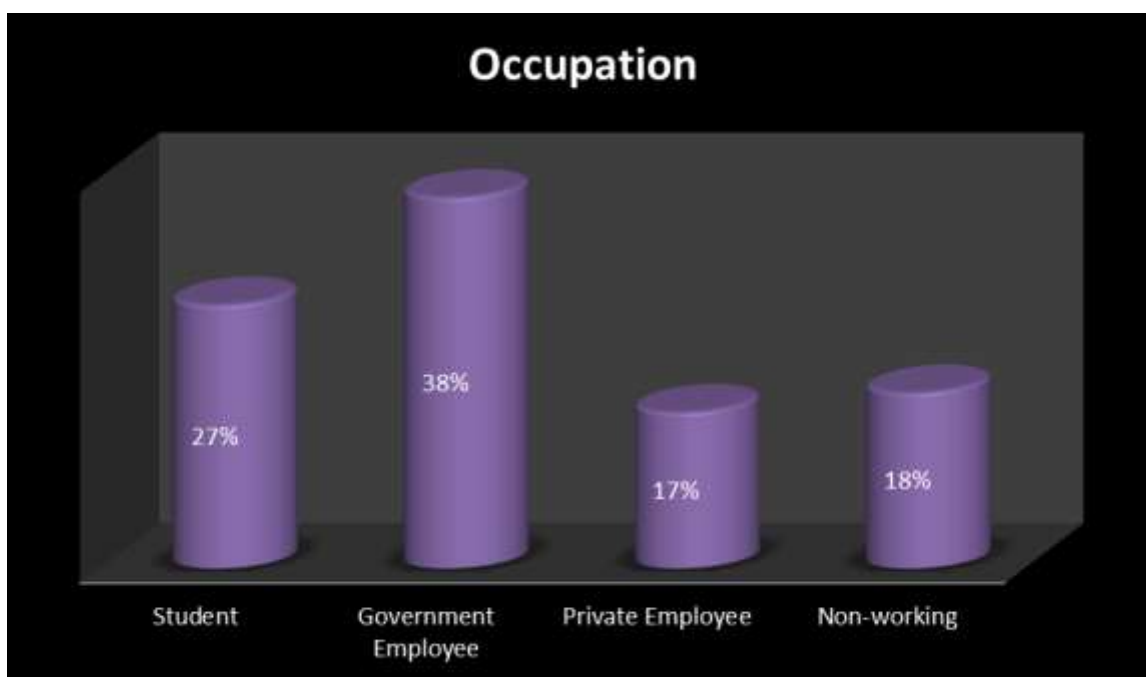


Figure 4: Occupation of the study participants.



Figure 5: Marital Status of the study participants.

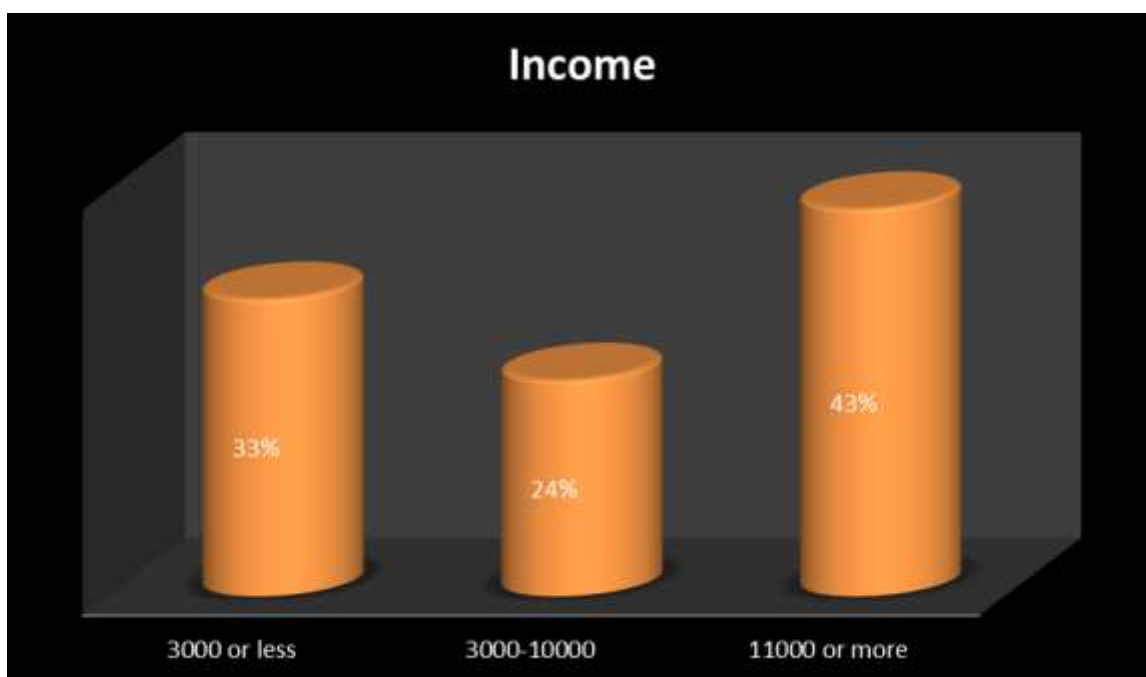


Figure 6: Income of the study participants.

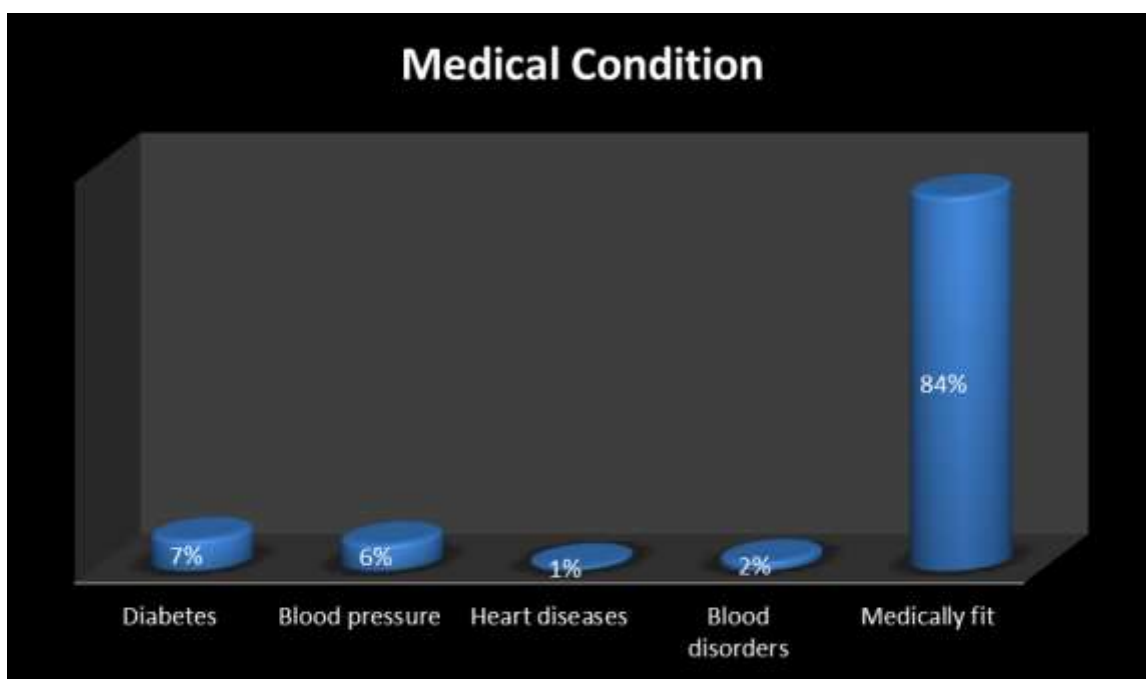


Figure 7: Medical Condition of the study participants.

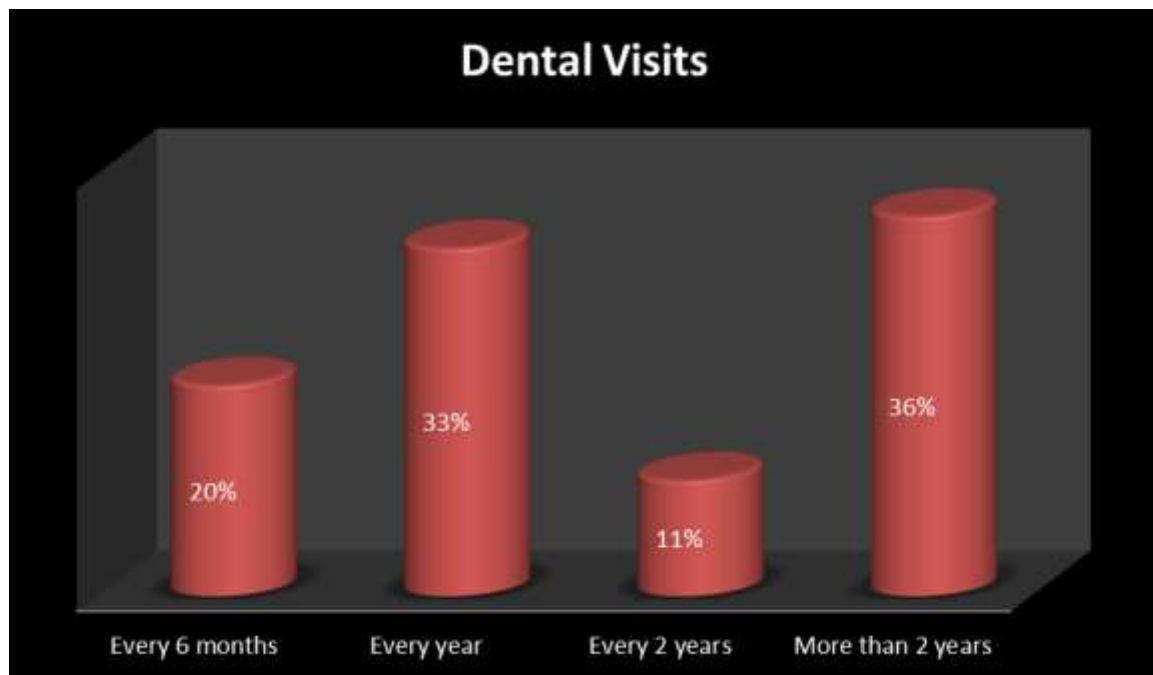


Figure 8: Dental Visits frequency of the study participants.

Table 1: Percentages of various barriers to dental care reported by the study participants.

Barriers to Dental Care	Percentage
High cost (Private hospitals)	25%
No medical insurance	14%
Hard to search for a good provider	14%
No reminder messages to patient	4%
Long appointments (Government hospitals)	11%
More easier to reach non-dental specialists (Pharmacists, General practitioners)	2%
All of the above (At least 3)	30%

Table 2: Comparisons on the basis of Gender.

Barriers to Dental Care	Males	Females	P-value
High cost (Private hospitals)	24%	25%	0.326
No medical insurance	14%	14%	
Hard to search for a good provider	12%	15%	
No reminder messages to patient	5%	4%	
Long appointments (Government hospitals)	9%	12%	
More easier to reach non-dental specialists (Pharmacists, General practitioners)	3%	1%	
All of the above (At least 3)	33%	29%	

Table 3: Comparisons on the basis of Age.

Barriers to Dental Care	18-25 yrs	26-35 yrs	36-45 yrs	45+ yrs	P-value
High cost (Private hospitals)	23%	22%	26%	24%	0.599
No medical insurance	15%	12%	14%	16%	
Hard to search for a good provider	19%	14%	12%	10%	
No reminder messages to patient	6%	3%	5%	4%	
Long appointments (Government hospitals)	11%	12%	9%	13%	
More easier to reach non-dental specialists (Pharmacists, General practitioners)	2%	2%	1%	2%	
All of the above (At least 3)	24%	35%	33%	31%	

Table 4: Comparisons on the basis of Nationality.

Barriers to Dental Care	Saudis	Non-Saudis	P-value
High cost (Private hospitals)	23%	48%	0.002
No medical insurance	15%	9%	
Hard to search for a good provider	14%	15%	
No reminder messages to patient	4%	8%	
Long appointments (Government hospitals)	11%	7%	
More easier to reach non-dental specialists (Pharmacists, General practitioners)	1%	2%	
All of the above (At least 3)	32%	11%	

Table 5: Comparisons on the basis of Occupation.

Barriers to Dental Care	Student	Government Employee	Private Employee	Non-working	P-value
High cost (Private hospitals)	22%	21%	33%	26%	0.000
No medical insurance	14%	16%	7%	18%	
Hard to search for a good provider	20%	9%	18%	14%	
No reminder messages to patient	6%	3%	8%	1%	
Long appointments (Government hospitals)	13%	12%	8%	9%	
More easier to reach non-dental specialists (Pharmacists, General practitioners)	1%	1%	5%	0%	
All of the above (At least 3)	24%	38%	21%	32%	

Table 6: Comparisons on the basis of Marital Status.

Barriers to Dental Care	Single	Married	Divorced	Widow	P-value
High cost (Private hospitals)	21%	27%	30%	15%	0.741
No medical insurance	14%	12%	11%	25%	
Hard to search for a good provider	18%	12%	11%	8%	
No reminder messages to patient	5%	11%	7%	4%	
Long appointments (Government hospitals)	12%	10%	15%	4%	
More easier to reach non-dental specialists (Pharmacists, General practitioners)	1%	2%	0%	0%	
All of the above (At least 3)	29%	26%	26%	44%	

Table 7: Income of the study participants.

Barriers to Dental Care	3000 or less	3000-10000	11000 or more	P-value
High cost (Private hospitals)	24%	24%	25%	0.454
No medical insurance	16%	12%	14%	
Hard to search for a good provider	16%	17%	11%	
No reminder messages to patient	3%	3%	6%	
Long appointments (Government hospitals)	11%	9%	12%	
More easier to reach non-dental specialists (Pharmacists, General practitioners)	3%	0%	1%	
All of the above (At least 3)	27%	35%	31%	

Table 8: Comparisons on the basis of Medical Condition.

Barriers to Dental Care	Diabetes	Blood pressure	Heart diseases	Blood disorders	Medically fit	P-value
High cost (Private hospitals)	19%	30%	0%	18%	24%	0.538
No medical insurance	14%	16%	40%	18%	14%	
Hard to search for a good provider	9%	5%	20%	18%	15%	
No reminder messages to patient	0%	5%	0%	0%	5%	
Long appointments (Government hospitals)	7%	17%	0%	19%	11%	
More easier to reach non-dental specialists (Pharmacists, General practitioners)	0%	0%	0%	0%	2%	
All of the above (At least 3)	51%	27%	40%	27%	29%	

Table 9: Comparisons on the basis of Dental Visits frequency.

Barriers to Dental Care	Every 6 months	Every year	Every 2 years	More than 2 years	P-value
High cost (Private hospitals)	15%	28%	24%	27%	0.128
No medical insurance	15%	13%	18%	14%	
Hard to search for a good provider	23%	12%	11%	12%	
No reminder messages to patient	3%	5%	6%	5%	
Long appointments (Government hospitals)	16%	7%	9%	11%	
More easier to reach non-dental specialists (Pharmacists, General practitioners)	2%	2%	2%	1%	
All of the above (At least 3)	26%	33%	30%	30%	

DISCUSSION

This study aimed to determine the reasons behind the lack of dental care accessibility among the residents of Riyadh city. It can be noted from Table 1 that the most common barrier to accessing dental care was high cost (25%), whereas 11% of the participants believed that the long waiting times in government hospitals was the major reason. The later was

supported by a study conducted by Mofidi, Rozier & King (2002). Which reported a large majority of patients unable to receive dental care from public hospitals. The main reasons were long appointments and behavioral issues.

Our findings suggest a lack of dental care access among medically compromised patients. However the prevalence of such cases is not high, but this information was supported by an investigation performed by Lewis, Robertson & Phelps

(2005). They related the special care children with their dental needs, which went unmet due to their condition. Similar results were observed when cited the information provided by Agili et al (2004), revealed that the medical condition is directly proportional to lack of dental care.

Furthermore, statistically significant comparisons were observed when the findings were compared on the basis nationality, with the p-value being 0.002. Non-Saudis were observed to be bothered by the high cost of private dental care, however, the Saudis complained of not having medical insurance on in order to pay for their dental treatment.

Moreover, the lack of medical coverage was also reported by the private employees when compared the survey points on the basis of occupation. It was additionally noted that a prominent majority of private employees found much easier to reach non-dental specialists in order to fulfill their primary dental care needs (table 5). These comparisons were found to be statistically significant (p-value 0.000). Finally, all remaining comparisons were not statistically significant.

CONCLUSION

- High cost of private dental care and a combination of all problems associated with lack of dental care were found to be the major barriers.
- No significant relationship was found when compared the barriers on the basis of gender, age, marital status, income, medical condition and frequency of dental visits.
- Statistically significant differences were obtained when compared on the basis of nationality and occupation of the participants.

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CONFLICT OF INTEREST

No conflict of interest among the authors.

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