Analyzing Private Dental Clinics in Riyadh City – Saudi Arabia

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Introduction

✓ There is a significant rise of oral diseases in the Kingdom of Saudi Arabia (ministry of health, 2015).

✓ Previous studies have indicated that regular dental visits lead to better oral health and improve quality of life (McGrath C, Bedi R., 2001).
Introduction

✔ The Saudi Ministry of Health (MOH) has put much of its attention to develop and upgrade the public health sector across KSA.

✔ In 2010, the MOH budget compromised 6.49% of the governmental budget which was SR 35 billion and in 2015 it rose up to 7.25% of the governmental budget which was SR 62 billion (Ministry of Finance).
Introduction

- Riyadh is one of the world’s fastest growing cities (Brookings Institution).

- Its population has risen steadily at a rate of 4% per year. According to governmental data (GaSTAT).

- There are 654 dentists working under the umbrella of the MOH.
## Population Size

**Population by Nationality in KSA (2015):**

<table>
<thead>
<tr>
<th></th>
<th>Saudi population (males)</th>
<th>Saudi population (females)</th>
<th>Non Saudi population (males)</th>
<th>Non Saudi population (females)</th>
<th>Total Estimated population size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10,614,813</td>
<td>10,515,147</td>
<td>7,076,815</td>
<td>3,314,643</td>
<td>31,521,418</td>
</tr>
</tbody>
</table>

**Population By Nationality In Riyadh* (2015):**

<table>
<thead>
<tr>
<th></th>
<th>Saudi</th>
<th>Non Saudi</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4,853,117</td>
<td>3,057,747</td>
<td>7,910,864</td>
</tr>
</tbody>
</table>
Introduction

- Dentists in private sector in Riyadh region has reached.
- 2533 residents.
- 475 registrars (specialists)
- 103 consultants.
- A total of 3111 dentists working in the private sector in Riyadh region.
Introduction

• Patients seeking dental care in the private sector often lack basic information about private dental centers in Riyadh city, Such as:
  • Location.
  • Dental specialty offered in these clinics.
  • Nationality of clinicians.
  • Gender of practicing dentists.
<table>
<thead>
<tr>
<th>Page</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>68</td>
<td>Physicians and Dentists, MOH Hospitals by Speciality, Grade and Region, 1436H.</td>
</tr>
<tr>
<td>81</td>
<td>Physicians and Dentists in Health Centers, MOH by Main Specialities, Nationality, Sex and Region, 1436H</td>
</tr>
<tr>
<td>111</td>
<td>Physicians and Dentists in the Private Sector by Speciality, Professional Categories and Region, 1436H</td>
</tr>
</tbody>
</table>
جدول 2-17 (الأطباء وأطباء الأسنان بمستشفيات وزارة الصحة حسب التخصص والدرجة والمنطقة 1436 هـ)

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Consultant</th>
<th>Registrar</th>
<th>Resident</th>
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</thead>
<tbody>
<tr>
<td>Riyadh</td>
<td>451</td>
<td>57</td>
<td>88</td>
<td>306</td>
</tr>
</tbody>
</table>

Dentistry
Table 2-34 (PhD, 1436H)
Objectives

• The purpose of this study is to survey private dental clinics and analyze its workforce in Riyadh city

• This will be accomplished by testing the following aims:
Aim 1

• To locate all private dental clinics in Riyadh city.
Aim 2

• To analyze dentists practicing in private dental clinics in Riyadh city based on their:
  
  • Specialties.
  
  • Nationalities.
  
  • Gender.
Long Term Goal

• Innovative methodology that could be useful in locating dental services and its specialties.
Research Ethical Approval

• The Ethics Committee at the College of Dentistry Research Center (CDRC), King Saud University located in Riyadh, Saudi Arabia has approved this study with a reference number IR 0199.
Test Aim 1

- To test aim 1, data was collected from the Ministry of Health (MOH) in Kingdom of Saudi Arabia that oversees the licensing and operation of private dental clinics and polyclinics.
Materials and Methods of Aim 1

- The data was extracted and organized according to Riyadh city’s district (Municipality).
- Dental clinics were visited to confirm its existent and location.
- Inclusion criteria include any private dental clinic listed in MOH,HA registry system in June 2016.
- The address, contact number and year of establishment was also included.
Test Aim 2

1. A Representative of each dental clinic was interviewed and answered a questionnaire.

2. Data was collected based on the current dentists practicing. Gender, nationality and specialty of each dentist was also recorded.
Materials and Methods of Aim 2

<table>
<thead>
<tr>
<th>Classification</th>
<th>Specialty/التخصص</th>
<th>Nationality/الجنسية</th>
<th>Gender/الجنس</th>
<th>Dentist/الطبيب</th>
</tr>
</thead>
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</tbody>
</table>

Center Name:

Date of establishment:

Contact number:

Municipality:

Number of Dentists:

• اسم المركز:
• تاريخ الإنشاء:
• رقم الاتصال:
• البلدية/ الحي:
• عدد الأطباء:
Data and Statistical Analysis:

- Microsoft Excel 2013 software and SPSS 10 for Windows (Statistical Package for Social Sciences; SPSS Chicago, IL, USA) was used to tabulate and analyze the results and for graphical representation. Descriptive statistics and multiple pairwise analyses was conducted.

- For geographical representation Google Maps and ArcGIS were used.
RESULTS
Results
The MOH list provided has a total of 236 dental clinics registered and they were all visited. Out of 236 clinics, 68.6% (n=162) accepted to be enrolled while 31.4% (n=74) refused to participate.
It was found that the total number of dentists was 877. The majority of dentists were males (n = 561, 63.97%) compared to female dentists (n = 316, 36.03%).

Gender

- 64%
- 36%
Nationalities

- The majority of dentists were non-Saudis (n = 760, 86.66%). Syrian dentists (n = 353, 40.25%) were the highest among the other nationalities followed by Egyptian dentists (n = 150, 17.10%), and then Saudi dentists (n = 117, 13.34%).
• The general practitioners were the highest dentists group (70.5%, n = 618) compared to specialists and consultants (29.5% n= 259).

• specialists/consultants, orthodontists had the highest number (42.9%, n=111).
Year of Establishment

Between the period from 1984 to 1991, the number of clinics established were 10 which composes 4.23% of the total surveyed clinics in Riyadh city. While, between 2012 to 2016, there has been 59 clinics which composes 25% of the total surveyed clinics in Riyadh city.
RIYADH MANUCIPALITIES
Location

- The location of all private dental clinics registered in MOH system according to municipalities of Riyadh city was also analyzed. It was found that among the 236 dental clinics registered, there were 49 clinics in Olaya, followed by 45 clinics in Rawdha.
Rawdah
DISCUSSION
Discussion

• Healthcare in KSA is one of the main focus areas of vision 2030.

• One of its initiatives is to increase the efficient utilization of available resources and the use of technology and digital information.
Discussion

• The current governmental data lacks basic information such as exact locations and survey of clinicians in private dental clinics.

• The aim was to develop a database and analyze clinicians workforce of private dental clinics in Riyadh city.

• It is believed to be the first study of its kind in KSA.
Discussion

• Results obtained indicated that most of dentists workforce were males (n= 536).

• Dental clinic centers reported 341 dentists to be females.

• Patient’s perception and preference of either genders in KSA is lacking and needs to be studied.
Discussion

• 40% of dentists working in private dental clinics were Syrians.

• There are significant increase in number of Saudi dental graduates in the last 5 years. Yet, it appears that the private dental clinics fail to recruit them.
Discussion

• There are many explanations that can be elicited.

• Non Saudi dentists may accept low wage and work for extended hours.

• Saudi graduates prefer government jobs for long term security and postgraduate education opportunities.
Discussion

• The MOH plans to spend over 23 billion Saudi riyals on new initiatives to meet 2030 vision. (http://vision2030.gov.sa/en/ntp)

• The current study give a window to adopt plans in order to address this issue.
Discussion

• Dental clinic centers are not evenly distributed geographically in Riyadh city.

• The location of dental centers was found to be a main factor discouraging patients from receiving dental care. (Mussard, J. et al 2008)
Discussion

• Riyadh city is considered to have very crowded streets. (Mussard, J.et al 2008)

• It has been reported that the patient’s satisfaction increased as the dental clinics center was in close proximity location. (Mussard, J.et al 2008)
Conclusion

• Private dental clinic centers are not distributed evenly in Riyadh city.
• The majority of dentist’s workforce are Non-Saudis.
• There are more general practitioners compared to specialists.
• There is need for more specialists in some of dental specialties.
Acknowledgment

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