

The current status of Dentistry in Qatar.

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Content:

- Current OH infrastructure in Qatar.
- Dental caries indicators.
- Study on DC in Qatar.
- Recommendations.
- Challenges and need for improvements.

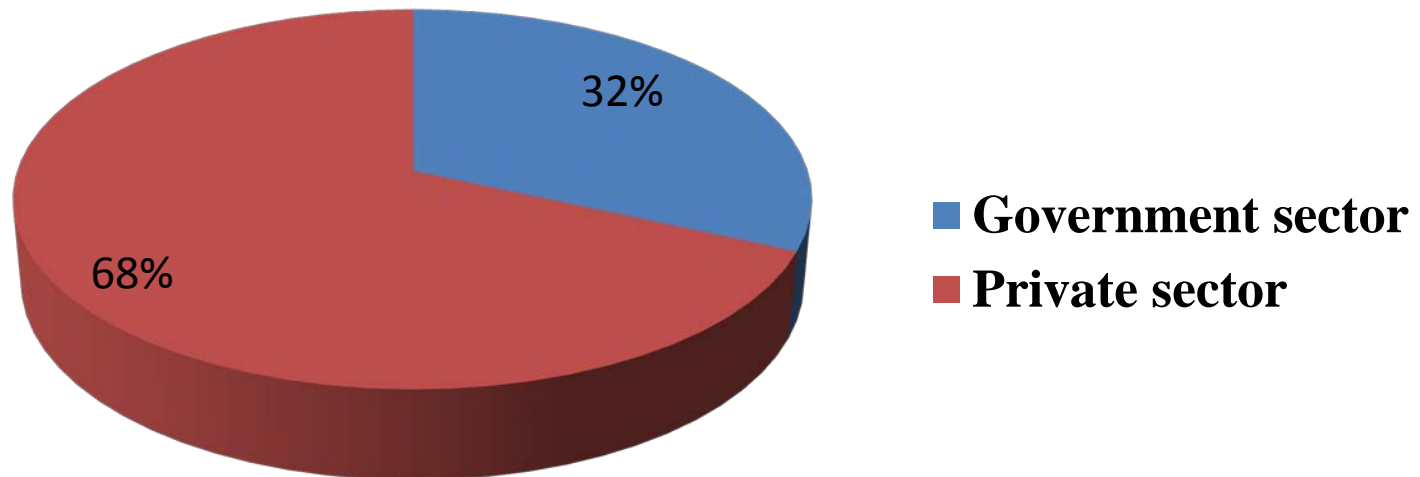
Current oral healthcare infrastructure and Workforce

Facts to know:

- Establishing baseline data on children DC and other OH issues through regular national surveys is crucial for planning and development of intervention programs (WHO, 2012).
- In Qatar, the oral healthcare system is in a transitional development stage, and systematic data collection is needed to evaluate and plan oral healthcare for the public.
- The total number of Primary Health Care Centers are 21 (was 23). Dental services available in 19 out of 21 (Al Ghuwaria & Al Karaana no dental services). Furthermore, dental services in some of the centers are open only in morning.

Facts to know:

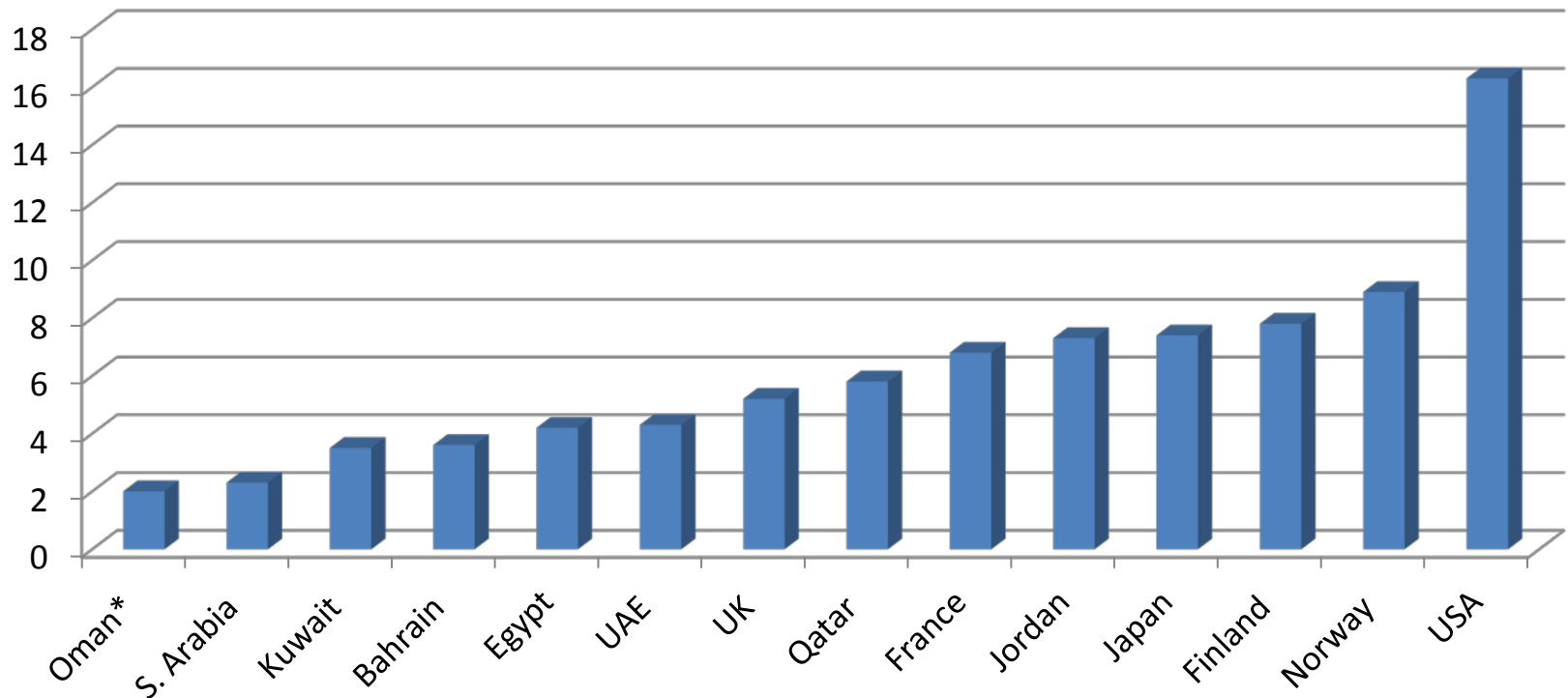
- The total number of dentists in the country is about 935, whereas 296 dentists work in the government sectors, while 639 dentists work in private sectors (Qatar Statistics Authority, 2012).



Facts to know:

- The average dentist-population ratio in Qatar is 5.8 dentists for every 10,000 population and most of them are based in Doha (the capital) (WHO, 2012).

Dental Workforce (Densities) in Selected Countries (2012)



Number per 10,000 population

Source: the WHO statistics 2012

Facts to know:

- Unfortunately, to date; there is no dental school in Qatar (Saudi Arabia 28, Oman 1, Kuwait 1, UAE 5).
- No dental Journal.
- Moreover, Qatar has not yet developed a system in which routinely regular dental visits are the accepted norm.
- In addition, an OH education program has not been launched either.

Facts to know:

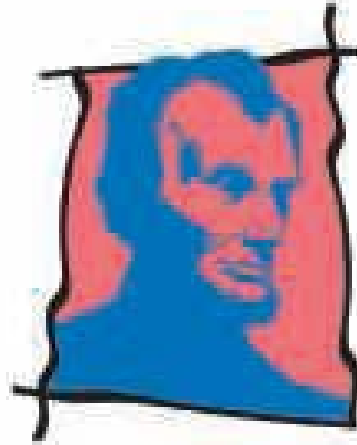
- Also, most services are treatment- rather than preventive in orientation (WHO, 2006).
- Moreover, in regard to human resources planning, it seems that there are no clear plans to match needs with number and categories of health personnel (WHO, 2006).
- Also, there is poor linkage between continuing medical education (CME) programs and career development (WHO, 2006).
- Currently, the demand for dental services in the governmental sector results in long waiting queues and long waiting lists for an appointment. Consequently, the population experiences difficulty in obtaining dental services when they need it.

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Dental caries indicators

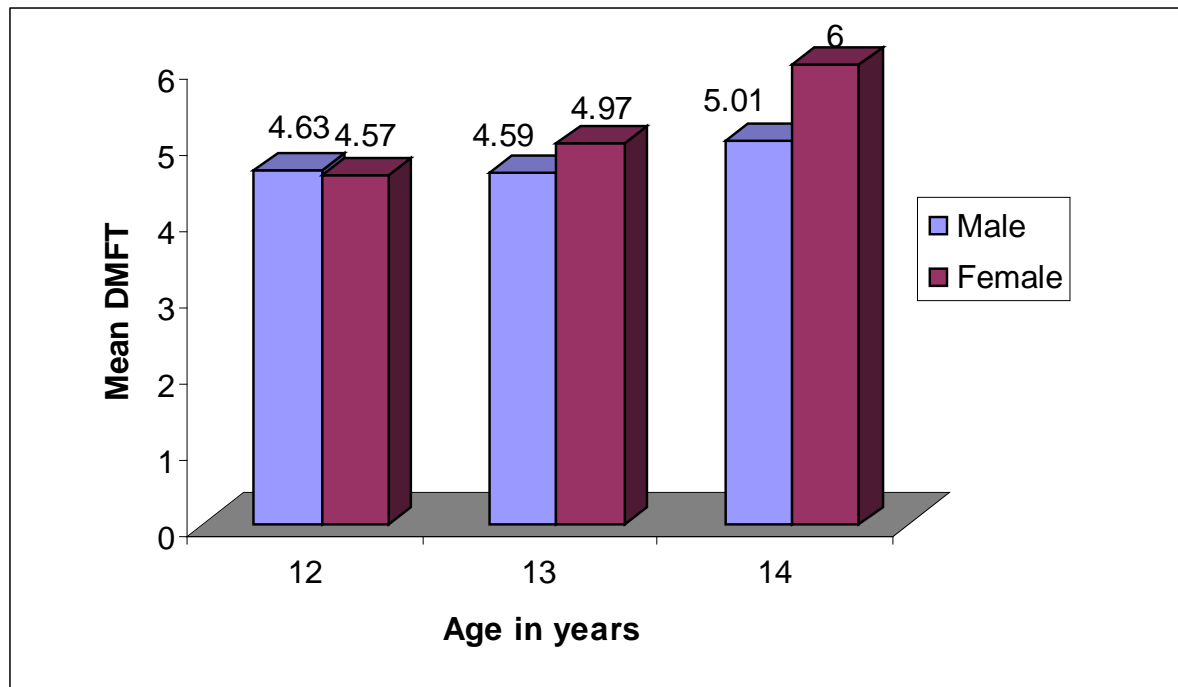
- Dental caries is commonly measured by a value, which is the sum of the number of decayed, missing and filled teeth (DMFT Index) (WHO, 2000).
- Although the DMFT Index has been in use for more than 80 years, it remains the most commonly used epidemiological index for assessing DC (Broadbent and Thomson, 2005).
- In 1983, the World Health Organization (WHO) and International Dental Federation (FDI) established the first global OH goal of an average not more than three decayed, missing, and filled permanent teeth (DMFT) at the age of 12 years to be achieved by the year 2000 (Aggeryd, 1983).

- During the following decades most high-income countries reached or even exceeded these goals, but for many low-income countries this remains a remote aspiration (World Health Organization, 2000).
- In 2003, the FDI, the WHO and the International Association for Dental Research (IADR) issued new “Global Goals for Oral Health 2020” (Hobdell *et al.*, 2003). The new OH goals were not numerically specific. Instead, each country may specify targets according to its current disease prevalence and severity, local priorities, and OH systems.

Dental caries study results

Within the limitation of the study, the research highlights the following findings:

1. The prevalence of DC among school children in Qatar is 85%. The mean DMFT value is 4.6, 4.8, and 5.5 for the 12, 13 and 14 year old children respectively. These values reach a very serious level and it is above the recommended level of the WHO (not more than three decayed, missing, and filled permanent teeth (DMFT) at the age of 12 years).



Bar diagram showing mean DMFT among 12-14 year old school children across male and female.

2. The decayed (DT) and missing component (MT) was the major contributor in the DMFT value.

3. The OH knowledge in Qatar is below the satisfactory level. Only one quarter (25.8%) of school children reported a high level of OH knowledge, which means that 75% of children in Qatar have unsatisfactory level of oral health knowledge .

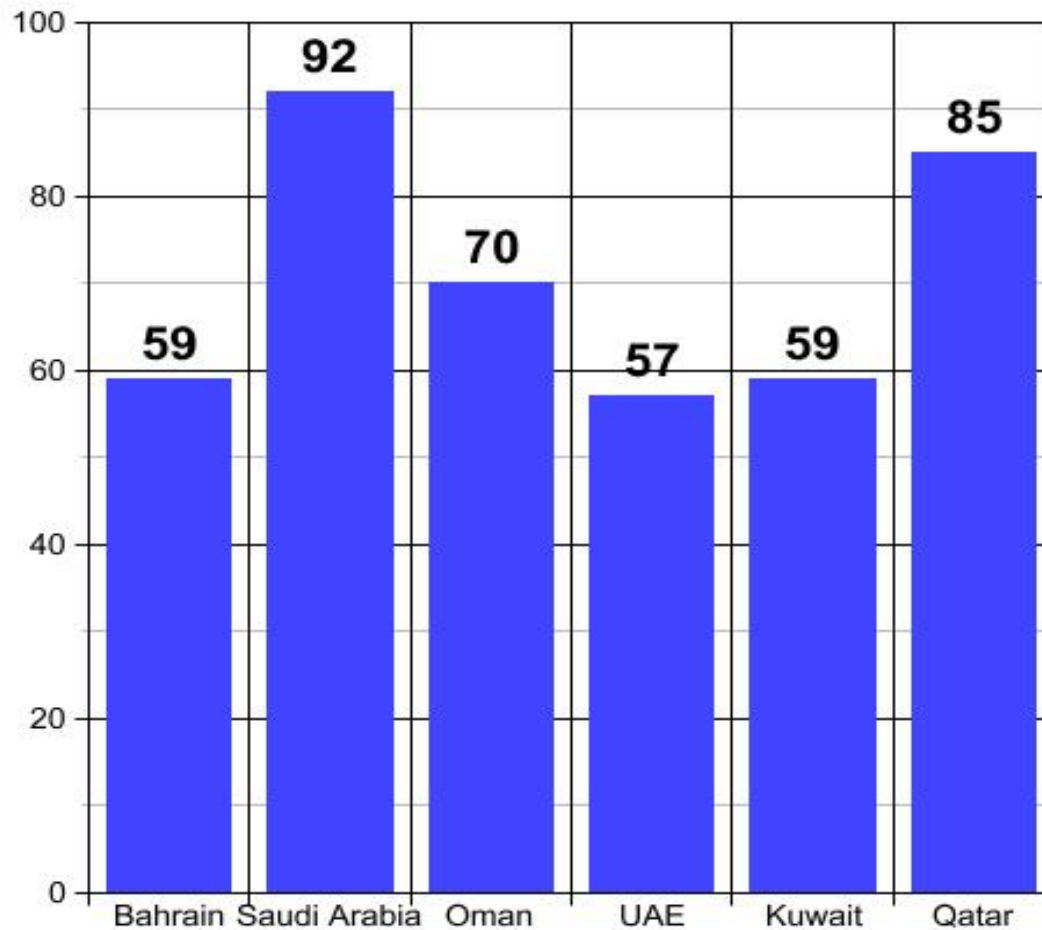
4. Approximately 36.0% of the children in Qatar had exposure to passive smoking. Most of recent researches confirmed the association between passive smoking and Health problems and one of these health problems is oral health. I heard that the ministry of interior and specifically the Police department are planning to restrict smoking cigarettes in private cars. I totally support this project and I know that in UK they are studying to implement same rule.

5. Almost 49.0% of children skip eating breakfast regularly and most of recent research confirmed that this habits have a direct relation with increasing dental caries especially in children.

6. Comparing the findings with data from other Eastern Mediterranean region countries, the mean DMFT value for 12-14 year old school children in Qatar obtained in this study were among the second highest in the Eastern Mediterranean region countries. It is just exceeded by Saudi Arabia.

Area	Author/Year	Country	Sample size	Age	% of caries	DMFT
Eastern Mediterranean region countries	El-Nadeef et al., 2009	United Arab Emirates	1323	12	54%	1.6
			1328	15	65%	2.5
	Al-Mutawa et al., 2006	Kuwait		12	26.4%	2.6
				14	21.7%	3.4
	Al-Sadhan, 2006	Saudi Arabia	205	12-14	93.7%	5.94
	Ahmed et al., 2007	Iraq	392	12	62%	1.7
Pakpour et al., 2011	Iran	380	12-16	20%	2.62	
Nurelhuda et al., 2009	Sudan	1109	12	30.5%	.42	
Other countries from different regions of the world	Subedi et al., 2011	Nepal	325	12-13	53.2%	1.6
	Grewal et al., 2011	India	520	9-12	52.3%	.86
	Masood et al., 2012	Malaysia	1830		70.5%	.58
	Yabao et al., 2005	Philippines	1200	6-12	68.2%	2.4
	Casanova-Rosado et al., 2005	Mexico	1640	12	49.4%	3.11
	Jamelli et al., 2010	Brazil	689	12	71.8%	2.9
	Delgado-Angulo et al., 2009	Peru	90	12	83.3%	3.93
	Elias-Boneta et al., 2003	Puerto Rico	1435	12	81%	3.8
	Hysi et al., 2010	Albania	372	12	85.5%	3.8
	Milciuviene et al., 2009	Lithuania		12	85.5%	3.7
				15	92.9%	5.6
	Pieper and Schulte, 2004	Germany		12	45.7%	1.24
Campus et al., 2008	Italy	1333	13-18	59.1%	1.94	

Prevalence of dental caries in 12 year old children



Future prospective

- Pre-school children fluoride applications
- School-based dental preventive programs
- Expanding the primary health care services
- Public education program focused on oral health prevention and education.
- The establishment of the National Dental Workforce Planning Group

- Recruiting an oral hygienist on a full-time basis to visit the schools, and initiate appropriate oral health and dental educational activities.
- Water Fluoridation.
- Sealant program.
- Raising awareness and translation of sound knowledge about risk factors of DC (through shopping malls, cinemas, sports stadium and others).

“The only good news about Dental Caries is that it is completely preventable at low cost”

“The bad news is that not enough is being done about it”

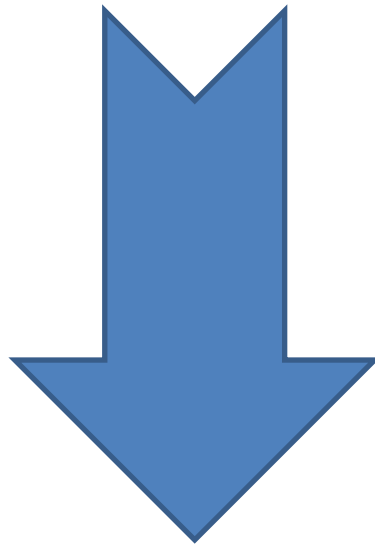




Challenges and need for improvements

- ❖ Limited dental facilities by most service providers.
- ❖ Un organized private dental sector.
- ❖ Inadequate communication between sectors providing oral health services.
- ❖ Lack of clarity between different stakeholders in carrying out oral health policy analysis, strategic health planning, priority setting and formulation of national health targets and standards.
- ❖ All stakeholders delivering oral health services are treatment - rather than preventive in orientation.

It should be our target, in this time of great socioeconomic development in Qatar to concentrate on:



**Education and Motivation
Towards Prevention.**

Publication

1. Bener A, Al Darwish M, Hoffmann GF.

Vitamin D deficiency and risk of dental caries among young children: A public health problem.
Indian J Oral Sci 2013;4:75-82.

2. Bener A, Al Darwish M, Tewfik I, Hoffmann GF.

The impact of dietary and lifestyle factors on the risk of dental caries among young children in Qatar.
Journal of the Egyptian Public Health Association 2013, 88:67–73.

3. M. Al-Darwish, W.E. Ansari, A. Bener.

Prevalence of Dental Caries Among 12 to 14 Year Old Children in Qatar.
The Saudi Dental Journal (2014), doi: 10.1016/j.sdentj.2014.03.006.

Next Step:



Towards better Oral Health

Qatar National Oral Health Plan



Towards better Oral health in Qatar



THANK YOU