

My elective at Sheikh Khalifa Medical City (SKMC) in Abu Dhabi

- 1) **To observe the effects of a rapid rise of affluence amongst the local population and its effect on the prevalence of obesity, Type 2 Diabetes and cardiovascular disease**

Abu Dhabi is the capital state of United Arab Emirates (UAE) which is a federation of 7 states made up of Abu Dhabi, Dubai, Sharjah, Ajman, Umm Al Qwain, Ras Al Khaimah and Fujairah, founded in 1972. My elective placement was based in Abu Dhabi at the Sheikh Khalifa Medical City (SKMC) which is a government owned multi-disciplinary hospital with a capacity of over 500 beds managed by the Cleveland Clinic USA. My observations are based on my elective in Abu Dhabi (and not the other states of the UAE) and the rapid transformation from a nomadic life existence to one of the most affluent styles in the world by the native population. Within a space of forty years there have been changes in every facet of their lives, forty years ago travel was mainly by camel or horses and housing were temporary tents which were moved according season and weather, the hot summers meant that families moved inland to the oasis city of Al Ain and during winter they moved back to the coastal city of Abu Dhabi to fish and pearl dive, the trips between the cities took many days through tough terrain.

After careful planning and the rapid rise in wealth, Abu Dhabi has attained one of the highest GDP per capita. As a result the majority of residents of Abu Dhabi experience a sedentary lifestyle that includes fully functional indoor AC's, shopping malls, cheap petrol, taxi's and much more to shelter you away from the outdoor scorching temperatures that can reach up to 48 degrees in the months starting from June to September

Now transportation is mainly done with the best equipped cars and vehicles in less than two hours on 5 lane motorways and all housing and public building are centrally air-conditioned, the physically hard work and even the simplest domestic work is now done by foreign workers. The tents have been replaced by palaces and mansions, with many Emiratis owning several homes and building many high rise apartments which are rented out to expatriate staff, which provide a very high source of income.

However with this substantial upward change in fortunes there has also come a not so pleasant change in health issues. Historically previous illnesses were mainly due to the nomadic existence such perinatal and infant mortality, little access to doctors and an over reliance on tribal elders for provide health advice, with the modern lifestyle the prevalence of diabetes, obesity, heart related illnesses has increased many fold especially amongst the youth. Whilst previously most local residents who were not afflicted by common nomadic illnesses, were mainly healthy and fit with virtually no modern day illnesses associated with a sedentary lifestyle, this has now changed due to a significant reduction in physical activity amongst residents, easy availability and consumption of fast food, this has lead to a sharp rise in cases of obesity associated medical conditions, type 2 Diabetes and cardiovascular disease among others. Type 2 Diabetes associated with severe obesity has been

picked up in children as young as 9 years! Even with this knowledge I was surprised to find that Abu Dhabi has the second highest prevalence of Diabetes in the world at 19%, which is only second to the Pima Indians¹.

Interestingly many of the long term expatriate residents are also acquiring the same illnesses, as a result of following the same lifestyle.

2) How are Diabetes services organised and delivered? How does this differ from the UK?

The medical services have also developed side by side's with the increase of the UAE fortunes, excellent medical facilities like new 750 bed Cleveland Clinic hospital being built for completion in 2014.

However with UAE being a relatively young country, the medical services are still going through a developing phase and are nowhere near or as seasoned as the NHS. The system here is mainly based on private insurance, to be paid by your employer by law or yourself if not employed. It has its own merits, the time between seeing a GP and a specialist might just be few hours as opposed to the NHS waiting lists which may be several months.

Routine, uncomplicated cases are dealt by their GPs. Uncontrolled cases or with complications are seen by endocrinologists. In addition to this the "London Imperial College Diabetes Centre", with a fully trained team of Endocrinologists, diabetes nurses, nutritionists, renal, cardiac specialists.

However mandatory private insurance has a tier system, the basic insurance only pays a certain percentage of the medication cost, hence foreign workers on low income with chronic diseases like Diabetes Mellitus struggle with paying bills for the newer and more expensive Anti-Diabetic medication and the majority bring their stocks from their home countries.

3) To study the changing health trends in the UAE population and to study the screening management and preventative health policies

There is growing awareness in the country about the newly founded epidemic of metabolic syndrome. Awareness programmes, such as sponsored walks and free screening for Diabetes, Hypertension and Cholesterol sponsored by the Health authority, certain organisations or private hospitals are seen on a regular basis.

I was privileged to walk around the world famous Yas Marina circuit, which has been made available to the general public to use the track for walking, running and cycling, encouraging a healthier lifestyle.

Since 2007, the Health Authority of Abu Dhabi (HAAD) has been running a programme aimed at free screening for nationals over the age of 18 for obesity and associated chronic disease. Forty eight private and public healthcare centres across Abu Dhabi have been involved. This involved screening for diabetes, obesity, hypertension and heart disease. Factors such as BMI, smoking and lipids levels were recorded. The screening in phase 1 found 36% of participants to be obese, 17% to be

hypertensive and 21% to be diabetic. Patients with modifiable risk factors are enrolled into a course to help them reduce their risk and it is decided what treatment they may need at their particular level of disease or pre-disease progression.

- 4) To visit the UAE, have a taste of their rapid growth and the cultural effects on the health of the population. Make friends and links in the country and interact with the medical students and observe their teaching programs. Observe the development of medicine in a rapidly developing country.**

In the newly established Medical Colleges in the UAE, it takes 5 years to complete the medical degree. On completion the student applies for a one year internship in medicine, but also rotates around other specialities. The purpose is to gain clinical experience in a hospital environment and learn to take responsibilities in preparation for a 4 year residency program. During the year they will be clerking patients and presenting during ward rounds, seeing new patients, forming differential diagnoses and management plans under supervision, and also attend lectures, journal club meetings, and teaching sessions. On completion of the internship you are given your license to practice (much like you are in the UK after completing your house officer year) and they are eligible to start a 4 year residency program (R1-R4).

I found the interns weekly teaching session which was much like our PBLs, the presenter would hold back certain pieces of information to avoid making the diagnosis too obvious, and let the students piece the puzzle together with subtle hints when required.

Bibliography

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