## ELECTIVE (SSC5c) REPORT (1200 words)

A report that addresses the above four objectives should be written below. Your Elective supervisor will assess this.

At Aspetar – Orthopaedic and Sports Medicine Hospital, I had the privilege of being able to observe a variety of clinics, targeted at two distinct patient groups. Of those attending clinics, over 80-90% were either Qatari Nationals or foreign nationals currently living in Qatar. For elite national and international athletes, I attended walk-in clinics, assessment clinics, follow-up clinics and screening services, and for those without a background of elite sporting activity, private outpatient clinics, usually for Qatari Nationals with musculoskeletal ailments.

It was very clear to see that in addition to sporting injuries, the majority of those attending the private outpatient clinics possessed a huge array of co-morbidities and non-communicable diseases such as obesity, hypertension, coronary artery disease, heart failure, diabetes mellitus, osteoarthritis and the metabolic syndrome. Common presentations were of acute and chronic muscular, ligamentous and tendinous pathologies and osteoarthritis. The musculoskeletal problems experienced by the non-athletic population were often compounded by the sedentary nature of the general Qatari population and often were not related to sporting activity at all. Of those musculoskeletal ailments linked to sport, many were principally due to lack of conditioning or lack of knowledge of correct techniques to execute and practice a certain sport efficiently and effectively. In contrast to this, the patients seen in the walk-in clinics were national or international athletes with a high level of conditioning and knowledge of their sport. These patients rarely had any associated medical problems.

According to the World Health Organisation, the co-morbidities mentioned above are relatively more prevalent in Qatar than in other countries in males only; for example, there is over double the level of obesity in Qatari males compared to the World Health Organisation region (30.8% vs. 13%). In females, there is also a higher level of obesity amongst the Qatari population (39.3% vs. 24.5%). The highest cause of death in Qatar is ischaemic heart disease, with 14.7% of the population dying from this. Diabetes mellitus is 2nd and stroke is 4th, and respectively, they kill 8.9% and 4.4% of the Qatari population.(1)

The Healthy Lifestyle Programme was implemented in 2013 at Aspetar, and aims to combat the above issues and reduce the burden of preventable non-communicable diseases by reversing lifestyle related risk factors using a lifestyle intervention programme which is both based on best clinical practice and is culturally accepted. This program is to be implemented through a variety of channels to ensure that it is available to the majorly of people in Qatar. Addressing factors such as unhealthy nutritional habits, smoking and physical inactivity can lead to reductions in non-communicable diseases and can also help combat weight gain and psychological well-being.

Currently in Qatar, there is a National Health Insurance Company (NHIC) which is a fully Government owned commercial entity established in July 2013 to implement and administer the Social Health Insurance (SHI) scheme. Public healthcare in Qatar is run by the Hamad Medical Corporation (HMC) comprising of many hospitals and the Primary Health Care Corporation (PHCC) comprising of 21 Health Centres. There are also private Hospitals, Sidra (opening in 2015) and Aspetar. The SHI was implemented by the Government of Qatar as a means to improve the quality of healthcare service delivery and to also incentivise public providers to improve access and quality by creating competition between public and private healthcare providers.(2)

Since 2011, healthcare in Qatar has been evolving; at the centre of this transformation is the National Health Strategy (NHS). There is a very clear commitment to a future that supports a healthy population both physically and mentally. The Qatar National Vision 2030 is being conveyed through the National Health Strategy 2011-2016 (NHS), which encourages healthy lifestyles, promotes public health, and provides quality community-based care as the basis of a successful integrated healthcare system. It also ensures and guarantees that in the future, everyone in Qatar will have access to affordable and effective services. People will be able to choose who they want to provide their healthcare services, from participating health providers within the public and private sectors.(2)

Primary health care has nearly become an equal partner to hospital care, with primary health care taking a greater role in supporting the public and patients to better manage their own health and wellbeing. Most people will receive advice and treatment in their local health centre with far fewer people ever needing to go to a hospital for specialized care.

While on placement at Aspetar, I had the opportunity to observe many consultations with those suffering from the early stages of osteoarthritis and conditions predisposing to osteoarthritis. The world-renowned sports physicians had access to an extensive document titled "The State of Qatar National Physical Activity Guidelines" which could be used to counsel and advise patients on a variety conditions and co-morbidities, such as hypertension, coronary artery disease, heart failure, diabetes mellitus, osteoarthritis and the metabolic syndrome. My main focus was on osteoarthritis and I was particularly interested in the measures used at Aspetar to reduce the burden of this disease on patients suffering from osteoarthritis. During these consultations the Sports Physicians advised patients on ways to prevent their joint health from deteriorating further and progressing to an advanced stage of osteoarthritis.

To reduce the prevalence of osteoarthritis, doctors advised patients to match the type and amount of physical activity to their abilities, and to keep the intensity of the exercise at a low level for a prolonged period of time; this assessment was often carried out during a pre-exercise medical assessment. Contact sports such as football, basketball, handball and rugby were not encouraged in those at risk of suffering from osteoarthritis. If patients experienced join pain, patients were advised to take paracetamol or NSAIDs. Another vital piece of advice for those with knee pathology was to ensure that while cycling, the seat height was at a level to ensure there was not excessive knee flexion beyond 90 degrees.

There were also extensive exercise prescription guidelines for those at risk of osteoarthritis, with the main aims of improving joint function and losing weight where appropriate. Regular aerobic, strength and flexibility exercises were recommended, and patients were advised to maintain a good baseline physical activity to improve posture, gait and increase strength and joint flexibility. In addition to these measures, the common co-morbidity of obesity was also often addressed. The Exercise is Medicine service was provided at Aspetar through the Healthy Lifestyle Programme; this initiative is vital in Qatar to tackle the ongoing obesity epidemic and tailors exercise prescriptions to an individual's needs, taking into account co-morbidities, risk factors and the benefits of physical activity.

These measures were used to reduce the prevalence of osteoarthritis at Aspetar and also reduce the progression of osteoarthritis in those suffering from osteoarthritis.

In Qatar, the sole sports medicine facility is Aspetar – Orthopaedic and Sports Medicine Hospital; Hamad does not provide official sports medicine care. Aspetar has received an appreciation for its commendable efforts and for hosting the most famous athletes in the world to diagnose and treat their injuries. The multidisciplinary team at Aspetar includes a team of prominent sports physicians, orthopaedic surgeons, physiotherapists, nurse specialists, podiatrists, dieticians, psychologists, sports scientists and other personnel, and the athletes. Its function is not only curative and rehabilitative, but also preventative, which is the most important of all.

In Qatar there is currently an absence of a training programme in Sports & Exercise Medicine and doctors in training are routinely sent to Aspetar to gain a wider appreciation of the speciality and to gain the necessary musculoskeletal skills and experience to effectively treat common pathologies seen in their practice.

The majority of athletes who have received treatment at Aspetar are Qatari. Aspetar is officially affiliated with the Qatar Olympic Committee (QOC) and the sports physicians provide world-class medical care, treatment and rehabilitation for Sports Club and Federation level athletes in Qatar. As mentioned above, this is primarily through walk-in clinics, assessment clinics, follow-up clinics and screening services. Athletes also have access to fantastic physiotherapy services, dieticians, psychologists, podiatrists and sports scientists.

1. Who.int. WHO | Qatar [Internet]. 2015 [cited 3 June 2015]. Available from: http://www.who.int/countries/qat/en/

2. Sch.gov.qa. Qatar Health System | Supreme Council of Health [Internet]. 2015 [cited 3 June 2015]. Available from: https://www.sch.gov.qa/health-services/services-to-public/qatar-health-system