

ELECTIVE (SSC5b) REPORT (1200 words)

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

1. As in much of the world, diabetes is a relatively common condition in Jersey. In 2014, the number of people recorded to have diabetes in Jersey was approximately 3500, equating to 3% of the population (Health Intelligence Unit, 2016). The majority of cases are type two diabetes (T2DM). This prevalence is lower than in the rest of the United Kingdom (UK), where prevalence in 2014 was reported to be 6.2% (Diabetes UK, 2016). This may be due to the different demographics of people living in Jersey, with a much smaller proportion of Asian and afro-Caribbean people, who are generally at higher risk of T2DM, than mainland UK. The prevalence of diabetes in Jersey is also significantly lower than the prevalence worldwide. Globally in 2014, the amount of people living with diabetes was 422 million, which was 8.5% of the population (World Health Organisation, 2016).

Obesity is a common problem for endocrinologists. In 2015 in Jersey it was reported that 10% of the population were obese, 4% were very obese, and 1% were morbidly obese, totaling 14% of the population (Independent Statistics Unit, 2015). Again this was much lower than mainland UK (Public Health England, 2017), where average prevalence of obesity in adults was 24.9%. The prevalence is similar to the worldwide prevalence of obesity of 13% reported by the World Health Organisation in 2014 (World Health Organisation, 2016).

Other endocrinology conditions that I have seen frequently during my time in Jersey include hypogonadism, hyperprolactinaemia, and thyroid conditions, however no statistics are available as to how prevalence of these in Jersey compares to the rest of the world.

Diabetes UK, 2016. Diabetes Prevalence 2016. Available online: <https://www.diabetes.org.uk/Professionals/Position-statements-reports/Statistics/Diabetes-prevalence-2016/>. Accessed 23/04/2017.

Health Intelligence Unit. 2016. Jersey Health Profile 2016. Available online: <https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20HealthProfile2016%2020161123%20HI.pdf>. Accessed 23/04/2017.

Independent Statistics Unit. 2014. Jersey Annual Social Survey 2015. Available online: <https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20JASS%202015%2020151202%20SU.pdf>. Accessed 23/04/2017.

Public Health England, 2017. UK and Ireland Prevalence and Trends. Available online: https://www.noo.org.uk/NOO_about_obesity/adult_obesity/UK_prevalence_and_trends. Accessed 23/04/2017.

World Health Organisation, 2016. Global Report on Diabetes. Available online: http://apps.who.int/iris/bitstream/10665/204871/1/9789241565257_eng.pdf?ua=1. Accessed 23/04/2017.

World Health Organisation, 2016. Media Centre: Obesity and Overweight. Available online: <http://www.who.int/mediacentre/factsheets/fs311/en/>. Accessed 23/04/2017.

2. The healthcare system in Jersey is in some ways similar to that in England, however in others is very different. Healthcare in Jersey is not part of the National Health Service (NHS). Hospital treatment, including emergency and non-emergency treatment, is free for residents of Jersey. However, to access primary care, residents must pay a fee. Patients must pay for GP appointments and for investigations done in primary care. Residents of Jersey for more than six months are able to get a health card, which gives discounts on GP fees (States of Jersey, 2017). This does mean that for patients with a chronic condition cared for in primary care, there is a significant expense.

Diabetes care in Jersey has similarities to that which I experienced in England. Patients with T2DM are often cared for in primary care by their GP, and referred into secondary care if their diabetes is more complex, or poorly controlled. Those with T1DM are cared for in secondary care. The diabetes services in Jersey are all encompassed in one building, the Diabetes Centre. Patients in secondary care services attend this Centre for all aspects of their diabetes care including appointments with the consultant or diabetes specialist nurses, podiatrist care or dietician advice. As in England, there are diabetes specialist nurses who are vital to the diabetes service. They help care for all the patients with diabetes in Jersey, by running clinics and also by giving telephone advice to patients.

Endocrinology clinics also take place in the Diabetes Centre. Similarly to England, referrals are made from primary care to this clinic, where they are seen by the consultant specialising in diabetes and endocrinology, and then patients are discharged back to primary care once their investigation and/or treatment has been completed. Some services require the involvement of NHS hospitals in mainland UK, for example care of obese patients. Bariatric surgeons from Portsmouth come once a month to see obese patients and to discuss the prospect of surgery, and also to follow up patients who have had bariatric surgery. Jersey has a contract with Queen Alexandra Hospital to do bariatric surgery on a set number of patients each year.

States of Jersey. 2017. Health costs when moving or returning to live in Jersey. Available online: <https://www.gov.je/Health/Travelling/Pages/MovingReturning.aspx>. Accessed 23/04/2017.

3. It is extremely important that measures are taken to prevent T2DM, as the numbers affected continues to rise. Diabetes can lead to severe complications including retinopathy, neuropathy, nephropathy, and also cardiovascular disease. Not only are these life-changing for the patients, but they also are a large economic burden. The NHS spends 8% of its annual budget on treating diabetes and its complications (NICE, 2012).

One way in which T2DM can be prevented is through the NHS Health Check. This is done on people aged 40-74 who have not yet been diagnosed with conditions such as diabetes or cardiovascular disease (NHS Choices, 2016). This health check involves an initial risk assessment, and then can lead to further tests, such as HbA1c, if patients are at high risk. Those identified to be higher risk of T2DM can then be offered advice on how to reduce this risk, which often involves lifestyle changes.

Obesity is known to be strongly associated with risk of T2DM through a variety of mechanisms (Kahn et al, 2006). Therefore by helping those who are overweight or obese to lose weight, the risks of

developing T2DM, and other complications of obesity, are reduced. There are many ways in which weight loss can be encouraged. Physical activity is very important. NICE recommends that all overweight and obese patients should be encouraged to do a minimum of thirty minutes of moderate exercise on five or more days per week in order to promote weight loss (NICE, 2015). It is possible for GPs to 'prescribe exercise', where patients can obtain free gym memberships, to help them to achieve this. Diet is also very important. GPs are expected to give dietary advice to those wishing to lose weight (NICE, 2015). GP surgeries often have access to a dietician, and patients can be referred to these services to further help them to improve their diet and reduce their intake.

Public health campaigns are useful in promoting some of these lifestyle changes. These campaigns, such as change4life in the UK, aim to encourage healthy living from childhood, thereby preventing people becoming overweight or obese, rather than treating this problem once it has occurred (Change4Life, 2011). This campaign in particular promotes healthy eating, giving ideas for simple recipes, and also ways of becoming more active. Prevention through campaigns such as this are a key strategy for tackling obesity, and therefore T2DM, in the UK.

Change4Life. 2011. Campaign overview and policy background. Available online: <http://www.nhs.uk/Change4Life/Pages/why-change-for-life.asp>. Accessed 24/04/2017.

Kahn, S. Hull, R. Utzschneider, K. 2006. Mechanisms linking obesity to insulin resistance and type 2 diabetes. In: Nature. Vol 44. Pp 840-846. Available online: <http://www.nature.com/nature/journal/v444/n7121/full/nature05482.html>. Accessed 24/04/2017.

NHS Choices. 2016. NHS Health Check: What is an NHS Health Check? Available online: <http://www.nhs.uk/Conditions/nhs-health-check/Pages/What-is-an-NHS-Health-Check-new.aspx>. Accessed 24/04/2017.

NICE (National Institute for Health and Care Excellence). 2012. Type 2 diabetes: prevention in people at high risk. Available online: <https://www.nice.org.uk/guidance/ph38/chapter/2-public-health-need-and-practice>. Accessed 24/04/2017.

NICE. 2015. Obesity Prevention. Available online: <https://www.nice.org.uk/guidance/cg43>. Accessed 24/04/2017.

4. The pathway to a career in diabetes and endocrinology begins with the completion of the two foundation years of training. It is then required to complete two years of a core training programme, which could be either core medical training or Acute Care Common Stem-Acute Medicine, during which time they must pass their MRCP exams. Then doctors must apply for specialist run-through training posts in Endocrinology and Diabetes. This higher training takes five years, and involves rotating through jobs in both district general hospitals and teaching hospitals. Those who are unsuccessful at obtaining a higher training post can take up fixed term specialist training posts for one to two years in endocrinology and diabetes, and then reapply for a run-through training programme after completing this. Once training has been completed, some doctors choose to further sub-specialise in either diabetes or endocrinology, however many continue to work in both areas (Mettayil et al, 2008).

Another potential career involving care of those with diabetes is one in general practice. This requires two years of foundation training followed by three years of training in general practice. Once this has been completed, a general practitioner (GP) may then develop a specialist interest in diabetes. In order to do this, GPs must show they have the necessary level of competence, through attachments in specialist diabetes services, and also by completing courses such as the postgraduate diploma in diabetes. GPs with a special interest in diabetes would be able to take over care of almost all those with diabetes from secondary care, except a few groups of very complex patients such as children and pregnant women with diabetes (MDDUS, 2012).

MDDUS. 2012. Tackling a diabetes epidemic: A career as a GP with a special interest in diabetes. Available online: <https://www.mddus.com/resources/publications-library/gpst/gpst-issue-05/careers-tackling-a-diabetes-epidemic>. Accessed 23/04/2017.

Mettayil, J. Quinton, R. Wahid, S. 2008. BMJ Careers: Careers in Diabetes and Endocrinology. Available online: http://careers.bmj.com/careers/advice/Careers_in_diabetes_and_endocrinology. Accessed 23/04/2017.