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SSC 5C Elective Report

Elective lead: Dr Sukhpreet Singh Dubb
Location: Aberdeen Royal Infirmary and the Royal Aberdeen Childrens Hospital

1. **What are the most common surgical presentations in Scotland compared to London and are there any relevant differences in patient demographics.**

Aberdeen is the third most populous city in Scotland following Glasgow and Edinburgh. The local grey granite quarries provide much of the infrastructure and buildings giving Aberdeen its nickname "The Granite City". The discovery of the North Sea Oil changed the economic mainstay from the traditional fishing and ship making trades to oil investments. The latest official population estimate as of 2011 is 223,000 with a median male age of 35 and female age of 38. This is typically younger than the Scottish national average. (Comparative Population Profile: Aberdeen City Council Area, Scotland). Aberdeen Royal Infirmary is the largest hospital in the city.

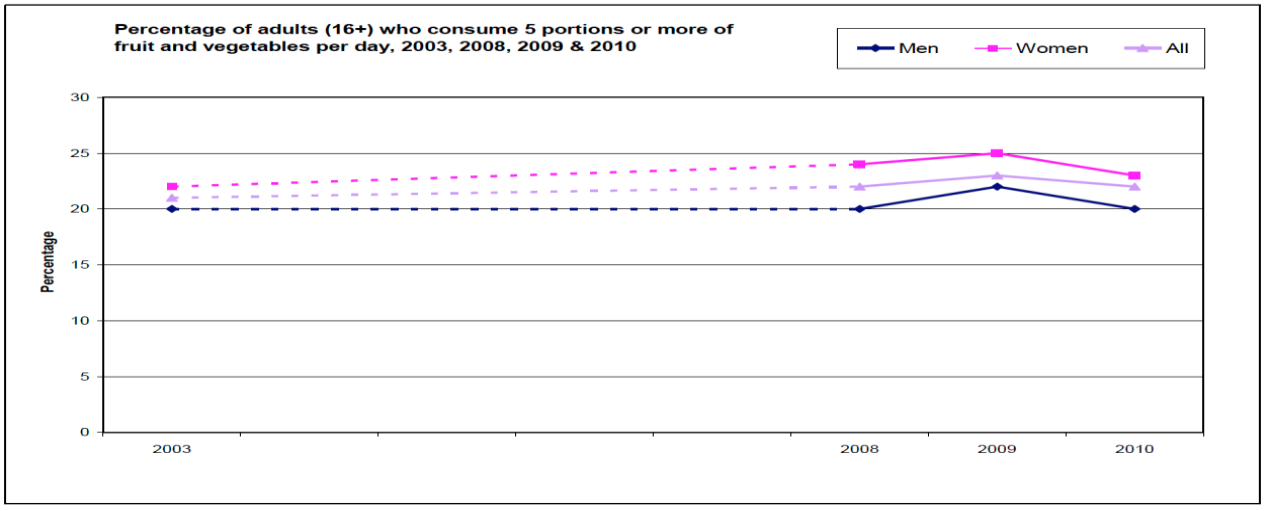
Dietary factors, Smoking and Alcohol

The poor dietary habit in Scotland is largely responsible for the poor health record attributed to the Scottish health system. A 1993 report demonstrated the Scottish diet to contain:

- Excess saturated fat
- Excess salt and sugar content
- Low consumption of fruit and vegetables

These are all known risk factors associated with one or more of cardiovascular disease, cancer, hypertension, type 2 diabetes and obesity.

The proportion of adults meeting the recommended daily intake of five or more portions of fruit and vegetables remains at 21-23% of adults.



Source: Scottish Health Survey 2010

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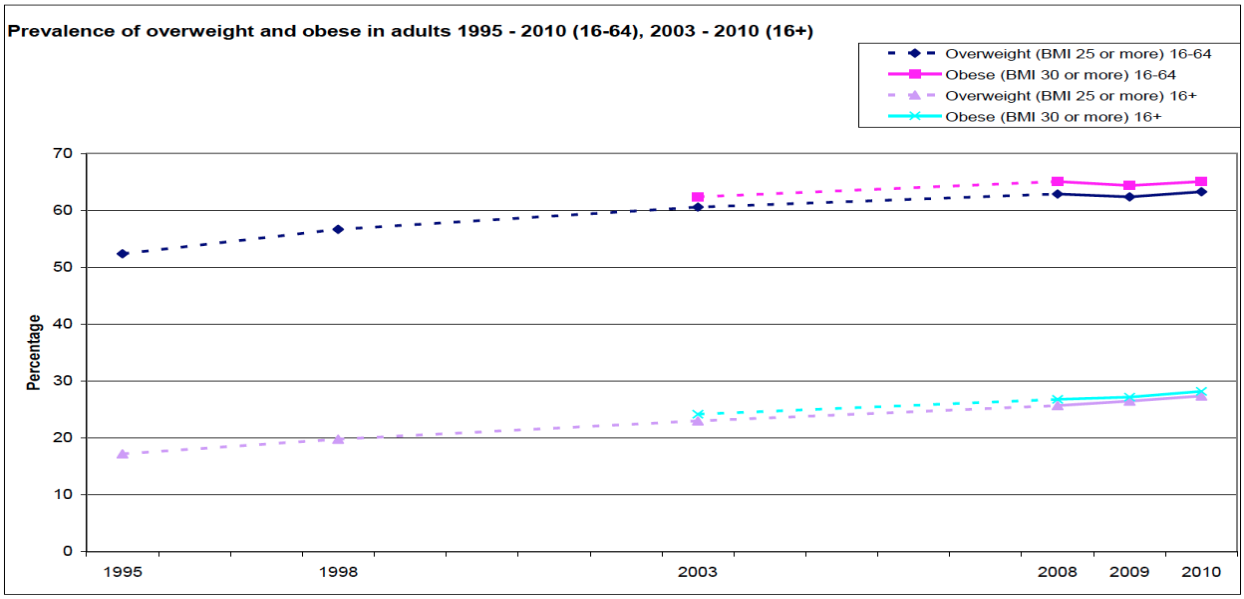
There has been a steady increase in the proportion of adults classified as obese in the age range of 16-64yrs (BMI of 25 or more). There has also been a steady upward trend in the prevalence of obesity (BMI of 30 or more) in adults aged 16-64.



Smoking

Smoking remains one of largest and significant contributory factors towards Scotland's poor health record. In 2004 approximately 13,000 deaths were attributed to smoking. This equated to almost 25% of all deaths being related to smoking.

Alcohol

The Scottish Government created a National Indicator that aimed to reduce the number of alcohol related hospital admissions by 2011. This followed an increasing trend in alcohol related admissions which only started to fall in 2008.

The combination of poor diet, smoking and alcohol make surgical disease pathology an important presenting factor in a vast majority of hospital presentations in Scotland:

- Increased presentations of acute cholecystitis, diverticulitis and cancer
- High cardiovascular disease morbidity associated with all patients
- Greater involvement of supportive services to make patients fit for surgery
- Greater postoperative risk in the postoperative period with more pressure on high dependency units and intensive care.

Despite the above coronary heart disease, cancer and stroke remain the 3 causative factors for mortality in Scotland.

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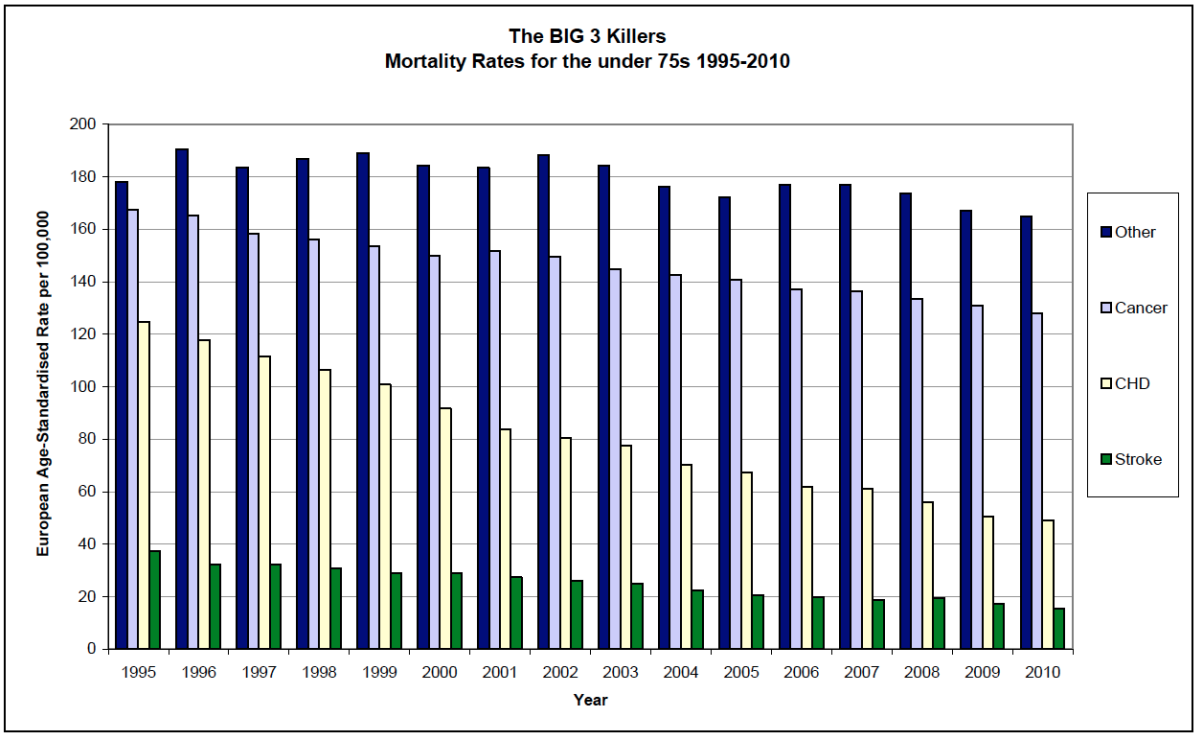

2. **How is surgical care accessed and delivered in more rural areas compared to urban areas. Are there any variations in the availability in resources?**

There is considerable variability and inequality between urban and developed areas of Scotland compared to rural areas. This is in stark comparison to London where even in Greater London the proportion of tertiary centres across the population provides the general public with easy and convenient access to the public health services.

In Scotland it is not uncommon for tertiary centres to be situated more than 45-60mins away, district general hospitals do help to alleviate the burden of health and can cater to emergency presentations including heart disease, minor injuries and trauma. However, most district general hospitals have a limited number of specialist services e.g. vascular surgery, thrombolysis suites and neurosurgery capabilities. Even in tertiary centres such as Aberdeen, more niche specialties have a ceiling of care that they can provide e.g. paediatric surgery after which transfers need to be made to specialist centres. This is especially true for rural areas such as the Shetland islands and Stownaway which can help to resuscitate and stabilise a patient but require emergency transfer for more advanced disease. As a result helicopter transfer services and ambulance transfers were common practice.

3. **Learn to competently deal with clinical situations with limited team members. What is clinical training like in Scotland?**

Despite the considerable health burdens in Scotland there is a significant shortfall in surgical trainees across teams to provide adequate clinical cover. The team construct in Aberdeen was the following:

- 4 Surgical Consultants
- 2 Surgical Registrars
- 1 Core Surgical Trainee
- 2 Foundation year doctors

The surgical registrars and core surgical trainee team members shared the same rota and were expected to fulfil operating theatre lists, clinics, ward supervision and on-call commitments. This effectively meant 2 surgical registrars being present to cover the operating list and see acute presentations. The other senior team member was usually on-call over night or off. The foundation

year doctors and I were expected to cover all of the surgical patients on the ward as well as cross-cover the orthopaedic wards.

Each surgical consultant would have their own subset of patients and would be on-call for 1 week before handing over to their colleague. The consultant on-call would have priority in starting their ward round at 8am and would be accompanied by all FY1 doctors and myself. Depending on the number of senior registrars they may begin a second ward round with another consultant or proceed to see the elective patients for consent and marking. The consultants would arrive at staggered periods in the day and each round typically lasted 30minutes. This meant that I alongside the FY1 team members needed to be extremely efficient in the documentation of patients under different consultants with a rapid turnover from one consultant to the next.

I found foundation year doctors to have much greater responsibility when compared to their London counterparts. In general FY1 doctors:

1) Expected to lead afternoon ward rounds of patients and be able to report accurately and succinctly any problems arising in patient care. This included abnormal blood results, scan results and deterioration in health.
2) Greater involvement in administrative tasks that included dictation of clinic letters and formulating surgical operating lists including emergency and elective theatres
3) The breadth of core procedures appeared to be the same including venepuncture, cannulation, blood cultures etc. However, Scottish trainees appeared to fulfil far greater volumes of these procedures due to limited help from phlebotomy services and volume of patients.
4) FY1 doctors were expected to receive GP referrals and clerk patients in readiness for senior review. Registrars and core trainees would accept A/E referrals but ultimately review all on-call patients.
5) During a night shift an FY1 doctor was expected to cover all medical and surgical ward patients. They were not expected to see any new presenting patients in A/E but were the first port of call for any jobs or sick patients on the wards. They had senior medical and surgical support at all times. Night shifts typically lasted 7 days.

My experiences throughout the elective enabled me to feel more confident and competent to deal with a wide variety of clinical situations. I felt I was pushed to my true potential and value each and every experience I had as I feel this elective has helped mould me into a better doctor.

4. Surgery as a potential Career

In summary of my experience in Scotland with the surgical team I had many positive experiences that I feel have made me mature as a future clinical practitioner. The highlights of my team with the surgical department included:

1) The large number of attending patients and limited staff meant a high pressure working environment yet all the team members from FY1 doctors up to and including the consultants were very supportive and encouraging.
2) I enjoyed the varied pathologies from non-specific abdominal pains, acute cholecystitis, appendicitis and even patients with suspected abdominal aneurysms.
3) The nature of surgery and surgical disease presentations required a fast pace and quick decision making which suited my personal nature. Patients required comprehensive but succinct clinical histories and evaluation of their health state. Patients who required surgery or intervention required rapid and accurate clinical work up including relevant blood investigations and the instigation of treatment such as intravenous antibiotics or insertion of nasogastric tubes.

4) I particularly enjoyed the immediacy of surgery and seeing acutely unwell patients, with for example, appendicitis being treated with almost immediate identification of the disease pathology and improvement of the patient.

Despite the clear advantages and positive experiences there were a number of caveats to a potential surgical career which included:

1) Very pressured environment which at times can be overwhelming. The need to attend theatre and perform accurately in operations whilst simultaneously being asked to see unwell patients in A/E or on the wards was not an uncommon occurrence. This is in contrast to medical specialties which often have double the number of patients to review but with a more sedate and slower pace
2) Surgery is often less well supported because of the need to attend theatre. This automatically removes the most senior supporting colleague to aid the consultant leaving junior team members to see patients in A/E or on the wards.
3) There seems to be a very unfavourable work life balance that even senior team members often have found difficult to manage. Balancing the day to day pressures of wards, patients and theatres was difficult. On top of this trainees would regularly be on-call every-2-3 weeks to due to late-shifts lasting 12 hours and then night shifts.

In summary I had a highly enjoyable elective experience with the department of surgery in Scotland. There was a highly variable and diverse presentation of patients who often had advanced disease states requiring considerable intervention. I had a genuine and honest insight into the great many fulfilling advantages to a surgical career and I would highly recommend this elective experience not only to prospective surgical trainees but also as a great training opportunity prior to entering foundation training.