

ACCIDENT
+ EMERGENCY

Elective Report

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Subject: Emergency Medicine,

Location: Royal London Whitechapel, London

Dates: April-May 2013

Objectives:

1. What are the demographics within Tower Hamlets and how does this reflect on the health of the residents and the use of emergency services?
2. Describe provision of emergency services in Tower Hamlets and North East London.
3. Learn about use of ultrasound in an emergency setting and triaging.
4. Personal and Professional Development Goals

1. What are the demographics within Tower Hamlets and how does this reflect on the health of the residents and the use of emergency services?

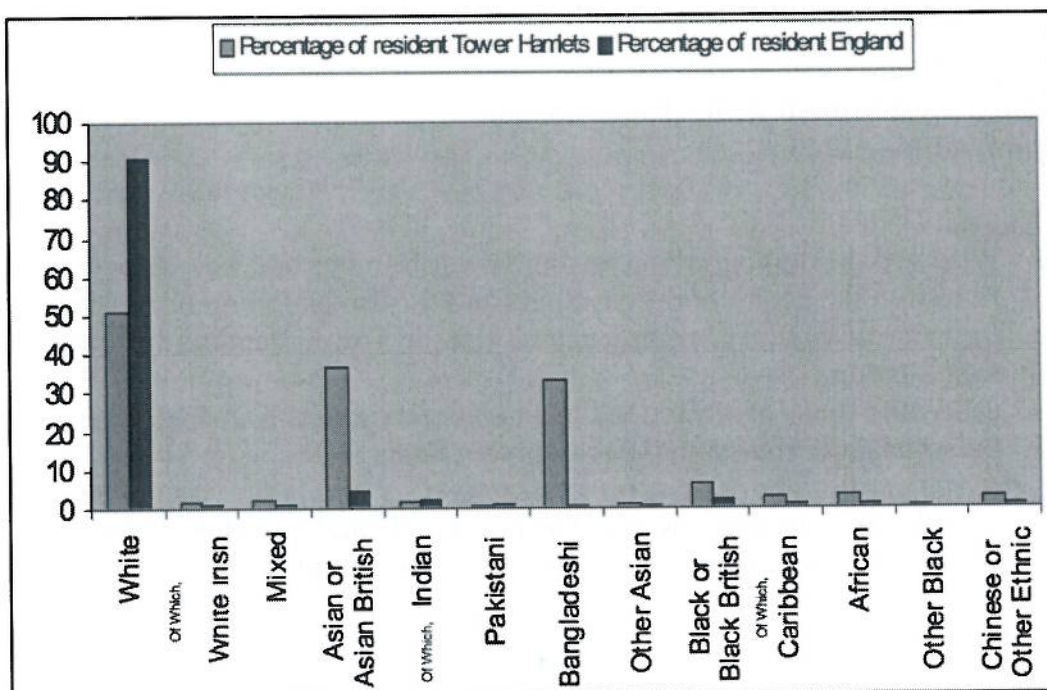


Tower Hamlets

It is a difficult task to accurately quantify the population of Tower Hamlets (see figure above). However it is generally agreed that is a densely populated area with an estimated population between 200,000 and 250,000. It is also a rapidly growing population and is expected to increase to 270,000 by 2016.

Tower Hamlets has been historically an area that is popular for immigration, with Jewish communities that moved on with increasing affluence. More recent immigration has been Asian and Bangladeshi community, of which the latter which constitutes approximately 34% of the population. Within the borough 6% is made up of African communities, with a particularly increasing Somali community. The Bangladeshi community is the largest single minority group in London (see figure below).

Figure 1.2 - Tower Hamlets and England Ethnic Groups



Source: 2001 Census, ONS

Not only is it a widely diverse area in terms of ethnicity, but also a young population as a result of national and international migration and population growth. In London 27% of the population are aged between 25 and 39, compared to 27% in Tower Hamlets.

The age distribution of the population is:

- 50,000 are aged under 16,
- 125,000 between 16 and 39 years old
- 50,000 between 40 and 60 years old
- 25,000 over 60

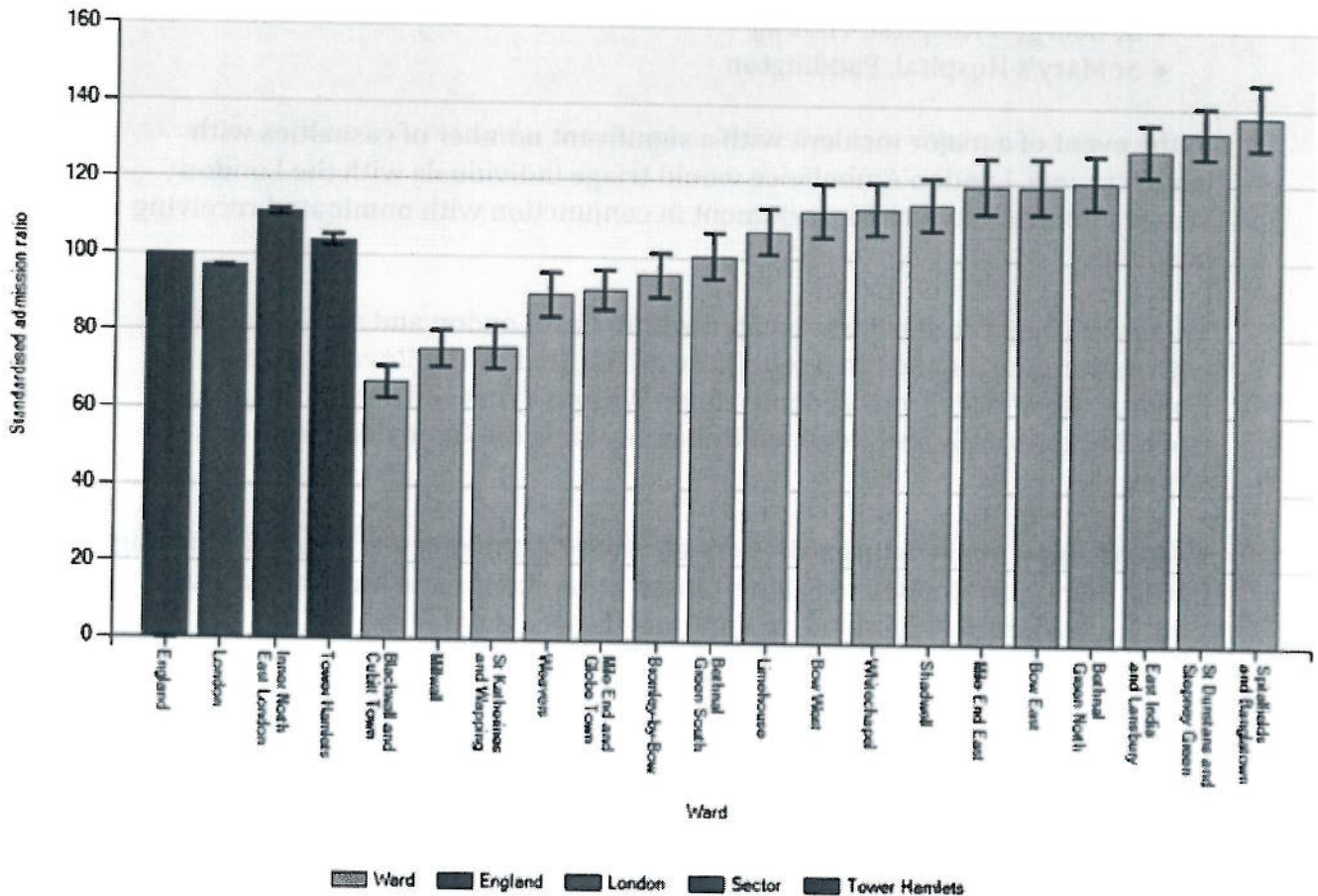
Within Tower Hamlets the main causes of premature death are cancer, cardiovascular disease and chronic lung disease. These are associated with the level of socio-economic deprivation, gender and ethnicity in the borough.

There is also a high use of emergency services:

In Tower Hamlets there is a high emergency admission rate and a low elective rate. This has been associated with the level of deprivation, as the highest emergency admissions are from the more deprived areas within the borough (see figure below).

Emergency hospital admissions (all ages) by ward (Tower Hamlets)

Period: 2009-10 Sex: Person



2. Describe provision of emergency services in Tower Hamlets and North East London.

Emergency medical services in the United Kingdom provide immediate care to people with acute illness or injury, and are predominantly provided by the publicly funded health care systems: the National Health Service.

There are approximately 1,600 trauma cases each year in London, the majority in central London and this equates to 0.1% of all A&E cases.

Major Trauma is a serious injury and generally includes such injuries as:

- traumatic injury requiring amputation of a limb
- severe knife and gunshot wounds
- major head injury
- multiple injuries to different parts of the body, e.g. chest and abdominal injury with a fractured pelvis
- spinal injury
- severe burns

London's four major trauma centres are located at:

- The Royal London Hospital, Whitechapel (Barts & The London NHS Trust)

- King's College Hospital, Denmark Hill
- St George's Hospital, Tooting
- St Mary's Hospital, Paddington

In the event of a major incident with a significant number of casualties with major trauma, London Ambulance would triage individuals with the London Trauma Centre Network for treatment in conjunction with nominated receiving hospitals.

There are urgent care centres located within East London and assess patients with minor injuries and illnesses. These are located at The Royal London Hospital. Open daily from 12noon-10pm, Whipps Cross University Hospital. Open 24 hours daily and Newham University Hospital Open daily from 8am-11pm.

There is also a minor injuries department at St Bartholomew's Hospital. Opening hours: 8am-4pm Monday to Friday. Closed at weekends and on bank holidays. This is a walk-in service so no appointment is necessary.

There is an out of hours GP service, there is a contact number on the GP answerphone. A doctor will call back and offer advice over the phone. If the patient needs to be seen, this will be at The Royal London Hospital site.☒☒

3. Learn about use of ultrasound in an emergency setting.

Whilst carrying out my elective I have attended an ultrasound course. This was useful not only from learning some basics on ultrasound, but how a patient may feel during the investigation. Having some rapport with the patient makes them feel at ease and simple explanations such as warning them that 'the gel will feel cold' help to enhance the doctor-patient relationship. Certain parts of the ultrasound, particularly the subcostal views of the heart were quite uncomfortable, and I am now aware of how this feels when I carry this out on a patient and will be better prepared to explain this to patients.

I also carried out a project on the use of echocardiography in the assessment of left ventricular function. I had to understand the basic concepts of left ventricular function, before I could understand the clinical relevance. I had to do a literature search, which I think will be useful in the future to carry out audits. This was useful as a project, as I could utilise the information I learned from the ultrasound course I attended.

Triaging

The triaging system prioritises the patients into the level of urgency of treatment required based on their assessment at the time of presentation. These patients are allocated numbers one to three and colour coded according to this level of priority and urgency (see figure below)

For example a P1 Trauma patient will be transported to the nearest or nominated Major Trauma Centre by the London Ambulance Service.

P1	Immediate Priority	Will die without immediate lifesaving intervention
P2	Intermediate Priority	Significant intervention required
P3	Delayed Priority	Medical treatment can be safely delayed
P4	Deceased	Assessed as deceased at scene of incident

4. Personal and Professional Development Goals

I have been interested in Emergency Medicine since carrying out a self-selected module at Homerton Hospital. Since then I have attended an Emergency Medicine Careers day, which involved speakers at various levels and workshops on interpreting electrocardiographs, focused ultrasound and triaging.

I really enjoyed the experience, as this has reinforced my desires to pursue a career in emergency medicine, I have learned much more about the use of ultrasound in emergency medicine and appreciate the complexity of an emergency department.