:lizabeth WINSON
Jinson

Elective Report

Muhimbili
Dar es Salaam

ACCIDENT + EMERGENCY

① The most common disease requiring management in Accident & Emergency & subsequent admission to the medical wards during my placement was malaria. Patients with malaria can present with a number of symptoms, but all the patients I saw had a fever and severe fatigue. Even in patients presenting for other conditions, malaria is an important part of the past medical history, as many people have suffered from and sometimes been treated for malaria in the past. In contrast to this very high prevalence, malaria in the UK is largely a disease of returning travellers.

A very common presenting complaint in A&E, & in patients on the medical wards, is difficulty in breathing. This is also a common presenting complaint in the UK, but the most likely differentials are different. I saw several cases of suspected or confirmed tuberculosis, sometimes on a background of HIV disease. Whilst tuberculosis is seen in the East end of London, it is not common in the UK as a whole.

Difficulty in breathing secondary to heart failure is a common medical problem requiring emergency & inpatient treatment in both the UK & Tanzania. However in the UK patients are generally older & often have a history of arteriopathy. In Tanzania however, many patients with heart failure have it secondary to rheumatic disease & are therefore much younger.

Many patients in hospital, with a range of medical illnesses, are found to be suffering from severe anaemia. This may be part of their main disease process or coincidental. Far more patients than not are anaemic, & so clinical findings such as conjunctival pallor, tachycardia & cardiac flow murmurs are common. Because of the very high prevalence of often severe anaemia, in combination with the difficulty in obtaining blood products, patients are only transfused if their haemoglobin is less than 4-5g/dl. In contrast, in the UK anaemia - particularly if severe - raises suspicions as to underlying disease. The cut off for blood transfusion is approximately 8g/dl. Furthermore, in the UK only packed red cells are used, whereas whole blood is sometimes used in Tanzania.

Finally, many patients are HIV positive. As such, a variety of related illnesses are seen with greater frequency than in the UK. In my time on placement these included PCP, pneumonia, Kaposi's sarcoma and non-Hodgkin's lymphoma.

② Muhimbili Hospital is a referral or consultant hospital, servicing the Eastern zone of Tanzania. Referral hospitals are the most well equipped & expertly staffed hospitals in the country. They can provide sophisticated emergency & intensive treatment, as well as specialist expertise, that is not possible in district or regional hospitals. Furthermore, Tanzania's referral hospitals have teaching, consultancy & outreach responsibilities to other health care delivery systems in the country.

These roles and responsibilities of Muhimbili hospital mean that its patients are referred from other, smaller hospitals such as Amana District Hospital in Dar es Salaam. In its turn, Amana may receive its patients directly - such as from the Ambulance service - or they may be referred from village dispensaries or other health centres.

As such, patients seen in Muhimbili A&E, or accepted on to the medical wards, have already been seen by health professionals in another setting. Sometimes this is very helpful, as patients may arrive with their initial working and investigations documented and some initial management instigated.

Often however, despite the commonplace nature of hospital - hospital transfer, limited history is available at the time of admission. As such, admitting doctors have to begin full assessment on their patient, as if they're at their first presentation. As information becomes available from the referring institution, the clinical picture may become more complete.

, however, in some clinical situations systems are in place in the
UK to take patients directly to the most appropriate hospital for their
definitive management. Examples include direct transfer to the London
Chest Hospital for percutaneous coronary intervention in
acute myocardial infarction; or transfer by air ambulance to the
Royal London for major trauma victims.
However, in many other clinical situations a comparable system
exists in the UK to Tanzania, to allow transfer of patients from District
Hospitals to larger centres for more specialist care.

) The largest disease burden under the category of trauma in Tanzania is from
road traffic accidents. Road safety is a particular problem in the city of Dar
s Salaam and driving, vehicles and safety equipment can often lead to severe
consequences from accidental collisions.
As discussed in the previous objective, patients arriving at Muhimbili A&E
following trauma had already been seen at another hospital for assessment &
initial management. This often meant a significant time period between the traumatic
insult and assessment in Muhimbili A&E.
The treatment received in the initial period depended on which hospital first
saw the patient. One memorable patient had had his open tibial fracture splinted
and dressed, prior to transfer to Muhimbili for surgical repair. On carefully
exposing the wound in resus, I was surprised to find that the splint was
actually a carefully manipulated empty glove box. Whilst this must have
initially held the leg firmly, ongoing bleeding from the wound had
rendered it soggy & ineffective.
This patient had been the victim of an assault, another common trauma
presentation in Muhimbili A&E. However the mechanism of this assault was
unlike anything I had ever seen before. The man reported that he had
been attacked by a gang. Closer questioning revealed that he was a thief who
had been caught & beaten by a mob intent on administering 'justice'. He had been
attacked with 'stones, metal rods & general household appliances,' and - his doctor
assured us - was lucky to escape with his life. As well as his open fracture, he
had a large number of lacerations & a moderate head wound & injury.
The third large group of traumatic presentations is industrial injuries. One
example is of a man who lost five fingers from one hand whilst at work in a
mechanised factory. The fingers could not be saved, but he received surgery to
stop the bleeding & repair as much of the damage as possible. This injury had a
significant impact on his ability to work & earn enough to provide for his
family.
The last major category of traumatic disease seen was burns. One male
patient suffered superficial but extensive burns to the entirety of his front
when his paraffin stove exploded. His wounds were dressed in A&E & he was
transferred to the burns unit.
All of the above causes of trauma (RTA, violence, industrial accident, burns)
are seen with significant frequency in the Royal London. However the type of
damage sustained differs with the mechanisms specific to each country - for
example the increased use of roadside cooking stoves in Dar gives rise to an
increased risk of burns of this nature.
) The Muhimbili Hospital environment was completely different from any setting I
had worked in before. Whilst I expected this, I in part believed that my
long standing interest & research into medicine in the developing world had left
me with realistic expectations. I think I expected this to reduce the impact that
the change in setting would have on me.
In reality, of course, I was completely unprepared. Both in A&E & on the ward
there were marked differences, not only in resources and patient numbers, but
also in diagnostic processes & management protocols. It was difficult initially to
feel of much use as part of the team, due to these differences. However both
teams made every effort to involve me & so I gradually adapted to the
setting out here, whilst still keeping my experiences at home as a point of
reference.
Perhaps the most frustrating experience is when patients are suffering from
conditions that could be managed if resources were available. One clear example is
patients suffering from chronic kidney disease. Muhimbili is working hard to set
up its renal replacement unit, but it is not in place yet, and the prohibitive cost of

ong term renal replacement therapy [illegible] with surgery [illegible] for patients
with acute kidney injury.

Despite the initial shock, & my frustrations at the limitations of the resources at times, I thoroughly enjoyed my time working at Mulago, & reaffirmed in my goal of pursuing a career with extensive international collaboration. Of particular use in my personal development was witnessing such collaborations, with an American team in ACE & a Swedish team in internal medicine. This enabled me to gain a sense of the kind of role a visiting medic can take on, & the sort of collaborations that are beneficial to both countries.

Seen:

Grade A.

Dr. Masoye

K.N.Y. MPANGA MFAWIDHI
KITUO CHA AFYA
KIBOOJI