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Elective Report SSC 5c

Interest: Trauma and Acute care – Trauma and Anaesthetics

The Chris Hani Baragwanath (Bara) in Johannesburg serves the population of Soweto (South Western Township). The patient demographic is predominately a black, poorly educated and disempowered one. This has a significant consequences on the type of medicine practised and the clinical conditions that present. Approximately 1/3 of Johannesburg's population lives in Soweto. The area is mostly composed of old "matchbox" houses, built by the government to provide cheap accommodation for black workers during apartheid. There is a high rate of HIV in this population. The relative poverty and lack of education mean few patients take anti-retrovirals or manage their own health adequately. Few patients take the initiative to present to hospital with their health complaints and if they do, their presentation is often advanced or complicated due to comorbidities or high viral loads. Patients when they present are often very sick and are relatively difficult to manage.

Migration from the countryside and major growth of Johannesburg has led to mass unemployment, lack of adequate shelter and a basic infrastructure. When combined with the weak social services there is a prominent level of overall social dysfunction, crime and violence. As a result there is a high level of alcohol related injury and traumatic injury within this population. The majority of patients that present to the trauma department are stabbings. Shootings and RTA's are also common.

Finally in South Africa women are often viewed as inferior to men, as possessions and in need of being led and controlled with violence used to resolves crisis of male identity. Poverty and heavy alcohol consumption increase the risk of violence against women. The prevalence of a woman experiencing physical violence from a current or ex-husband or boyfriend was 24.6%.

Health Provision

Access to healthcare in South Africa has improved over the years. However, the quality of the provision of this healthcare is suboptimal in many areas and is widely reported by both healthcare professions and the general public and to have fallen in quality. Whilst at ground level, staff make the best of what they have available to them, it is clear that poor management and deteriorating infrastructure is severely influenced by politics and widely reported corruption. As a result the hospital is chronically understaffed and under resourced. Both of these factors have subsequent implications for the type of medicine practised. For example: increased communication and team work is required between doctors and nurses as the doctors rely heavily on nurses to distribute specific resources such as suture packs. These are kept locked away to prevent them being stolen and only the nurses have access to them. This can often be stressful on a busy night shift when relying on nurses who themselves have their own jobs to be doing.

Trauma is a hidden epidemic in South Africa, and unlike in the UK, care of injured patients is often relegated to the most junior doctors at the worst hours. The trauma on call shifts are 24 hours long and the anaesthetics on calls are 16 hours. The Bara serves a vast population and therefore patient turnover is very high and space is always an issue. Once a patient is handed over from the paramedics they are triaged. On a busy Friday and Saturday night resus and cubicles in the surgical

pit are often full and patients are commonly clerked and injuries attended to in the waiting room, which means often patient privacy is compromised to some extent.

In the anaesthetics department, there is often a shortage of ET tubes and broken or faulty equipment (leaking scavenger systems, a lack of syringe drivers etc). This means from a clinical point of view there is often more thought into the type or anaesthetic you give as a more traditional or obvious method may not be feasible. The doctors here are very good at improvising or reacting to unanticipated events as they are constantly having to think of a Plan B, or another way to get around a situation so the list can successfully run.

Trauma as a disease

The most important thing I learnt in the management of trauma is to have a sound understanding of physiology. It is key to have an appreciation of the body's normal state as well as how it compensates in times of stress for example when a serious injury is sustained. This enables one to successfully pre-empt the next stage in a patient's deterioration so that an intervention can be provided before the patient becomes critically ill or so that you can ensure you are prepared to manage the patient when the inevitable patient response occurs.

Knowledge of Pharmacology is immensely important. Many of the patients who went to theatre were critically ill. By using drugs to manipulate the body's normal physiological responses you can prevent certain reactions occurring or offsetting the side effects of some of the anaesthetic agents. Many patients were kept alive by administering certain medications. However, the issue is whether the body is able to recover and support itself without the support of drugs.

For me on of the biggest learning points was to go back to basics and think about specific receptors, which are stimulated in response to injury, how drugs can target this and how you can use one drugs side effects to offset another and keep a patient stable.