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ORTHOMEDICS

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ELECTIVE REPORT

Introduction

I have an avid interest in musculoskeletal diseases with a preference for the medical aspect of rheumatology. When the opportunity arose for a sponsored elective via Arthritis Research UK, I leapt at it and applied. I wanted to do my elective in the African continent, reasoning that the socioeconomic and climatic variations could offer a fascinating spectrum of conditions with advanced and extreme presentations.

I chose UCH Ibadan, Nigeria as my preferred location. It is my country of birth, and having departed for over 15 years, I thought it will be all the more an enriching experience to return on a medical visit. When this option was granted and finalised, it turned out to be a surgical trauma and orthopaedics placement. I didn't expect this, having misinterpreted that all placements were rheumatology. Nevertheless I pressed on, reasoning that trauma cases would be ample in populous cities like Ibadan from road traffic accidents alone.

Indeed, *B A Solagberu et al, 2001 in the Nigerian Journal of orthopaedics and trauma*, reported that trauma from road traffic injuries (RTI) constituted 40-90 % of emergency room incidence with high incidence in hospitals near motorways. Autopsy reports confirmed RTIs responsible for 80 % of unnatural deaths in some teaching hospitals. The non-existence or scarcity of organised emergency medical services and ambulance service in many areas contributes to a high preventable trauma death rate, as high as 74% in one report. A majority of road traffic accidents are irately reported to involve motorcycles overtaking other vehicles or manoeuvring past oncoming traffic.

My objectives for this elective placement were to understand the model for the delivery and funding for healthcare services in Nigeria. To appreciate the balance in the level of care provided in a government owned hospital, restricted in resources. Also, to appreciate the prevalence of trauma and practise of orthopaedics in Nigeria. Some personal objectives were to expand on my human relation skills by immersing myself in the local culture and social activities. I wanted also to learn the art of effective patient communication in Yoruba language and be reminded of the culture.

On my first morning, I followed a Consultant Orthopaedic surgeon and his registrars between the ward, along hospital hallways and outdoor stairways (where patients' relatives waited) and the preop waiting area in theatre. The Surgeon became increasingly frustrated as we trudged to and fro without result. Reason? The hospital operated a payment before treatment policy and doctors had to secure payment for every intervention before it was administered. Patients who were eager for treatment would sometimes optimistically promise that the money for surgery was at hand, and on that trust, the hospital would put them on the theatre list the next day. In most cases, the next day, just one or two patients on a list of five and more would actually have all the funds requested for the surgery and so many operations were left delayed or postponed. It was now 12pm. The first operation was scheduled to start at 9am. Not one of the patients on the list had yet gathered all their funds and itinenary in place for surgery. As a guest in the system, I sympathised with the patients and appreciated the difficulty they faced. Cost for surgery alone ran into tens of thousands of Naira (native currency) and what would have seemed like an unending list of demands and costs (for tests and invbestigations) were made of the patient. The same pattern I noted over again, starting from charges for A+E tests and x-rays to post op antibiotics and dressings. On the day of

surgery, payment for surgery must be secured, implants for surgery must have been purchased and blood donated by relatives must be prepared already before entering into theatre. Sometimes, mid-operation, relatives were sent to purchase sutures, post op dressings, plasters and antibiotics.

The National health insurance scheme (NHIS), an American based social health security system was in place in which healthcare of employees in the Formal Sector is paid for from funds created by pooling the contributions of employees and employers. Details of definitions and benefit package of the NHIS are included in the appendix.

The consultant bemoaned the inadequacy of the NHIS saying any appropriate health insurance for Nigerians would cover cost for unplanned surgery from accidents and costs for medications for chronic diseases like diabetes and for dialysis treatment, adding that cover for malaria treatment is insufficient.

When I asked, many of the doctors said they didn't hold NHIS cover. I got the impression it was viewed as redundant. Most that could afford would rather seek healthcare from a private hospital than a government owned one, and they were billed from point of consultation and daily if admission required.

I must say I saw the inherently disruptive and limiting aspect to the policy of payment before treatment in the provision of healthcare. It astounded me that even in A+E, for basic care, patients and relatives had to have all in place either prepared and brought with them in baskets or purchased at the hospital. Items such as gloves, gauze, antiseptics, syringes, needles, fluids and giving sets were produced by the patients and waited for. Sometimes I feel that, in such environment, it afforded some doctors a slow and apathetic attitude to providing treatment and management in general thereby compounding the delay in receiving treatment. It also meant sometimes that patient were not seen on medical priority but on their possession of funds for treatment

On the surgical wards, I saw an array of trauma cases I was unused to. There were many managed fractures of long bones of the upper and lower limbs as a result of trauma, most from RTA notably associated with motorcycles, many being communited and open at presentation. Some of the management devices were unfamiliar to me initially but subsequently recognise them to be external fixators, and free weights for skin and skeletal traction. I also saw many plaster of paris casts. On the paediatric wards, I saw the use of hip spicas.

Trauma cases ranged from burns of which I saw 3 cases, torn muscles and tendons (quadriceps and achilles witnessed) and commonest; fractures – open and closed.

Orthopaedic cases, which were more seen in clinic was dominated by osteomyelitis and chronic osteomyelitis in children and adults. This was very common for a number of reasons. Many were complications post trauma after late presentation. Others were due to spread from skin infections, abscesses and ulcers. Poorly managed and complicated skin infections were common. Causes of delayed presentations leading to complications were that patients would manage their wounds on their own and present when it persisted and became complicated. Others went to old fashioned independently practising nurses, who should normally be retired or be retrained and their skills updated. The worst predicament is suffered by patients who would seek help from traditional bone setters. These are not medically trained. They have the practise of contaminating and infecting

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wounds and tying limbs. These lead to several cases of severely infected fulminating wounds, advanced osteomyelitis with sinuses and abscesses and sometimes gangrenous limbs requiring amputation.

I was able to see many cases of osteomyelitis, with features of sequestrum and involucrum in x-rays of long bones and the hip/pelvis.

In children, there were also many cases of rickets with genu varum, genu valgum and windswept abnormalities. One of the doctors was able to demonstrate costochondral swellings of rickety rosary, wrist widening (splaying) and scoliosis in a two and a half year old child with rickets. Equally, many cases of Blounts disease were seen.

I noted that at the UCH, Orthopaedic surgeons worked closely with plastic surgeons due to the high incidence of trauma, presenting with open and complicated fractures, torn ligaments and muscles and grossly infected wounds requiring debridement and subsequent skin grafting and reconstruction.

I observed that the workload in trauma and orthopaedics was much mainly due to trauma particularly from RTIs. Consultants and senior registrars operated fracture clinics once a week and orthopaedic clinics also weekly. Trauma and orthopaedics theatre list ran almost every day and seemed to be determined mainly by availability of funds from the patient and relatives. I observed high quality theoretical teaching given to medical students and between fellow doctors. Knowledge was sound and up to date and practise aspired to be in line with international and European and American standards, but doctors acknowledged the limitation in patient's ability to afford some investigations and management and as well as the hospitals and country limited available resources.

Overall, I found this elective placement highly informative, educational and beneficial to my training as a doctor. I am better able to appreciate the differences in Nigeria's less funded healthcare system and some of the demographical differences in presentations at trauma and orthopaedics.

APPENDIX:

NHIS Operational Guidelines

I. <u>GUIDELINES FOR THE OPERATIONS OF THE FORMAL SECTOR</u> SOCIAL HEALTH INSURANCE PROGRAMME

1. Definition

The Formal Sector Social Health Insurance Programme is a social health security system in which the health care of employees in the Formal Sector is paid for from funds created by pooling the contributions of employees and employers.

The Formal Sector consist of the following:

- Public Sector
- Organised Private Sector
- Armed Forces, Police and Allied Services
- Students of Tertiary Institutions and
- Voluntary Contributors

GUIDELINE FOR PUBLIC SECTOR AND ORGANIZED PRIVATE SECTOR

1.2 Membership

Employees of the public and organized private sector employing ten (10) or more persons shall participate in the Programme.

1.3 Contributions

Contributions are earnings-related. The employer pays 10% while the employee pays 5%, representing 15% of the employee's basic salary. However, the employer may decide to pay the entire contribution. In accordance with the existing contractual agreement between employers and employees, especially in the organized private sector, an employer may undertake extra contributions for additional cover to the benefit package.

1.4 Waiting Period

There shall be a processing (waiting) period of sixty (60) days before a participant can access services.

1.5 Scope of Coverage

The contributions paid cover healthcare benefits for the employee, a spouse and four (4) biological children below the age of 18 years. More dependants or a child above the age of 18 would be covered on the payment of additional contributions from the principal beneficiary. However children above 18 years who are in tertiary institution will be covered under Tertiary Insurance Scheme.

1.6 Benefit Package

Healthcare providers under the Scheme shall provide the following benefit package to the contributors:

- i) Out-patient care, including necessary consumables;
- ii) Prescribed drugs, pharmaceutical care and diagnostic tests as contained in the National Essential Drugs List and Diagnostic Test Lists;
- iii) Maternity care for up to four (4) live births for every insured contributor/couple in the Formal Sector Programme;
- iv) Preventive care, including immunization, as it applies in the National Programme on Immunization, health education, family planning, antenatal and post-natal care;
- Consultation with specialists, such as physicians, pediatricians, obstetricians, gynaecologists, general surgeons, orthopaedic surgeons, ENT surgeons, dental surgeons, radiologists, psychiatrists, ophthalmologists, physiotherapists, etc.;
- vi) Hospital care in a standard ward for a stay limited to cumulative 15 days per year. Thereafter, the beneficiary and/or the employer pays. However the primary provider shall pay per diem for bed space for a total 15 days cumulative per year.
- vii) Eye examination and care, excluding the provision of spectacles and contact lenses;
- viii) A range of prostheses (limited to artificial limbs produced in Nigeria); and
- ix) Preventive dental care and pain relief (including consultation, dental health education, amalgam filling, and simple extraction).

Note: All Providers are expected to provide counselling as an integral part of quality care.