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SAFER PAEDIATRIC ANAESTHESIA THROUGH EDUCATION AND TRAINING IN TANZANIA – AN OUT OF PROGRAM TRAINEE EXPERIENCE

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This was very challenging, but also extremely rewarding at the same time.

I had the pleasure of a 6-month Out Of Program Experience in Tanzania, based at Bugando Medical Centre, a tertiary referral hospital in Mwanza, the second largest city located at the base of Lake Victoria.

In my first week of arriving, I experienced some nerve-wrecking practices which ignited a passion and drive for safer anaesthesia, predominantly within the paediatric surgical population. Such practices ranged from drug errors due to miscalculated doses to infant cardiac arrest from retained surgical gauze post ENT surgery.

Due to systemic incapacities, mainly the high cost of drugs and sheer lack of some essential medicines, (1) all drugs within anaesthesia were shared amongst patients until fully used up. This meant diluting a lot of drugs, occasionally more than once and drawing up the small required paediatric doses both left some room for errors. Lack of staffing and limited record-keeping practices meant infrequent data collection for audit purposes. Additionally, these mundane tasks would be left to the most junior person on the team, a trainee nurse or newly qualified nurse or doctor with no prior anaesthesia experience. These initial experiences presented an opportunity for additional educational sessions, which I arranged and delivered on a one to one basis as well as in lecture format.

In this attempt to improve quality and safety in anaesthesia, I developed and delivered a simulation training program for all staff after creating a quick reference protocol handbook for managing common anaesthesia emergencies. This was then attached to every anaesthesia machine following careful explanation and training on applying the algorithms. This was accompanied by a reference poster for common drugs used and their doses for different aged children to reduce errors in administration of medicines.

All these efforts received great positive feedback, but due to limitations on the ground, we were unable to formally audit these interventions. It remains my desire to continue giving back to this region, and can absolutely say without hesitation that it was the most rewarding worthwhile experience of my training.

Reference

1. Kuwawenaruwa A, Wyss K, Wiedenmayer K, Metta E, Tediosi F. The effects of medicines availability and stock-outs on household's utilization of healthcare services in Dodoma region, Tanzania. *Health Policy Plan.* 2020 Apr 1;35(3):323-333. doi: 10.1093/heapol/czz173. PMID: 31942625; PMCID: PMC7152726.