

INTENSIVE CARE NURSING IN RWANDA 1994 –1995

BY

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In August 1994, the Australian Service Contingent for United Nations Aid Mission In Rwanda II, departed Australia for Rwanda. This is a land locked central African county just south of the Equator. It is bordered by Uganda to the north, Zaire to the west, Burundi to the south and Tanzania to the east. The contingent was to provide medical support to the multinational force tasked with protection to the civilian Rwandan population.

Rwanda had had a long history of interethnic bloodshed, dating back to the fifteenth century. In the early 1990s there were repeated attacks with the Tutsi exiles of the Rwandan Patriotic Front attempting to overthrow the government. In April 1994, following the suspicious death of the Presidents of Rwanda and Burundi in Kigali, the capital of Rwanda, an horrific massacre took place. An estimated 500 000 to one million personnel were killed and hundreds of thousands of Rwandans were displaced.

The Australian Government had volunteered the Australian Defence Force to provide medical support for the United Nations Peace Mission. This was the first large deployment of medical personnel since the Vietnam War. Australia sent 100 medical personnel and approximately 200 infantry and support personnel. Our country rallied behind us as we prepared ourselves for the task at hand.

As the Officer in Charge of the Intensive Care Unit, this was to become one of the most challenging and rewarding six months of my life. Intensive Care Nursing in Rwanda was not like Intensive Care Nursing in Australia as my staff of ten and I were to discover.

The Intensive Care Unit (ICU) was set up in what had previously been the ICU for the Private wing of the Rwandan Hospital. This literally meant that there was space for three ventilated patients and four High Dependency Patients. Prior to the arrival of the main body of personnel, an advance party of 10 personnel had arrived in Rwanda to prepare the Hospital. From the accounts of the advance party and locals, we were lead to believe that during the war, all the doctors and nurses fled the hospital as the war took hold of the city. Evidence of sentences incomplete in documents with pens thrown on the table supported these claims. The patients were left to fend for themselves. The advance party found Intercostal Catheters and other invasive lines thrown on the floor of the ICU and congealed blood on the floors and in the toilets.

By the time the main body of personnel arrived, the hospital, although ravaged by the war, had some areas that could be easily converted into operational medical units. The first challenge for the ICU staff was to convert the barren space into something that could support our mission. Prior to leaving Australian our mission for the operation was to provide medical support to some 5,500 United Nation Personnel. The ICU had a holding capacity of three days, in the belief that the United Nations patients requiring additional ICU support would be repatriated to Australia or to Nairobi. Unfortunately, this mission changed whilst in country and we were faced with long term patients.

The ICU took shape quickly as cargo loads of stores were brought into the country. However, the one vital element of an ICU, ventilators were missing. These were to arrive ASAP. Unfortunately, it was six weeks before we saw an Australian Ventilator and so began the challenges of life in ICU.

It was fortunate that no ventilatory support was required in the first week of arrival in country. During this time we searched through the debris of the hospital and found some discarded ventilators. These had not been serviced and were gas operated, hence we were dubious about their use and how long we could sustain a patient before our oxygen supplies would be severely depleted without resupply in place. With the exception of the ventilators, the ICU could provide arterial monitoring, end tidal CO₂ monitoring and basic high dependency care.

Our first ventilated patient arrived in the second week. This soldier had sustained a gun shot wound to the chest from close range. We were told it was a suicide attempt, but we remained skeptical. After a rapid resuscitation, the patient attended the operating room for a thoracotomy prior to arriving in ICU. He survived the first 24 hours and we thought we were doing well. The ventilator had high pressures but we were never sure how much was due to the ventilator and how much to the patient. Within 72 hours, there were signs of Adult Respiratory Distress Syndrome (ARDS) seen on his routine chest XRay. At this stage we knew we were in for the long haul.

This patient survived 21 days in the ICU. We overcame the ARDS and he was able to sit out of bed, eat soft food and talk via his tracheostomy (we found fenestrated tracheostomy tubes in a storeroom). However, we could not overcome his demand for ventilatory support at night and the rapidly dwindling oxygen supplies. There were many challenges during the 21 days and many lessons learnt, the main ones being improvisation, don't test for something that you can't treat and the associated stress of an ICU.

Improvisation

When the load lists were developed and filled for the deployment, our mission was only to support patients for three days. To be confronted with a 21 day stay patient, in addition to the patients who filtered through the ICU during this period meant that our stores were not only rapidly depleted but also additional items were required. A major challenge was how to feed this patient without the parenteral support of Total Parenteral Nutrition and intralipids. We were able to obtain a small quantity of the latter from Medicine San Frontier, but again were conscious of depleting this supply too quickly as it may be needed for another patients as well. To overcome this shortfall, the ICU staff became gourmet enteral food processors. Somehow we obtained a food processor and the staff would process bits and pieces they received from their families at home together with rations supplied to us in order to feed and sustain this patient. Despite his initial weight loss, we were able to sustain him until he could eat some soft food. What an achievement it was, the day he ate scrambled eggs and yoghurt!

Positive end expiratory pressure (PEEP) was an essential element in the fight against the ARDS. Unfortunately, the ventilator we were using had no intrinsic facility available. Through some clever manipulation of tubing by our biomedical electrician, we were able to rig up a primitive PEEP by connecting tubing and forcing oxygen through water. We measured the amount of water in the container and were effectively able to deliver about 10cm of PEEP. Skin integrity was a further challenge we faced. This patient was extremely fragile in the early days and although he received regular skin care we were conscious of the risk of skin breakdown. Gloves were filled with water and

placed under bony prominences and the bubble wrap used to bring over some of the stores was placed under the patient. During his period of confinement, there was only one small break in his skin.

Don't test for the sake of testing nor treat for the sake of treatment. So often we find in modern ICU, the need to routinely test blood gases and the like. With stores dwindling and oxygen now being rationed, it became senseless to test for blood gases. The rationale was that we couldn't give any more oxygen, so why test? Furthermore, this situation reinforced a lesson we try to instill in all junior medical and allied professionals – use your eyes. How quickly people become reliant on the monitors to tell them how the patient is progressing. Yet, our skill of observation is generally more reliable if well practiced. This skill was reinforced many times during our deployment.

We were also mindful of the degree of intervention that was provided to patients and how these patients could be rehabilitated in the long term. While our contingent was in country, Rwanda had a medical facility equivalent to a western society. However, upon our withdrawal, this country would revert to a third world medical system, albeit an efficient system by Third World Standards

The stress of an operational ICU.

ICUs in western society are generally a stressful situation for patients and staff. To some degree, ICU in Rwanda was less stressful than in an Australian ICU as there were limitations on the degree of support that could be provided and generally we were only providing a ventilatory support and little more. However, there were other stressors that are not experienced in daily life. The greatest of these I believe was living in an austere environment without the support of loved ones and the freedom to walk away at times or enjoy normality. In a typical ICU in Australia, there is normally some rotation between patients and there is always the return home at the end of a shift. In Rwanda, the patients were our life, our reason for existence in that country, and our perceived contribution to humanity. We became emotionally attached to the patients and consequently when there was a death, we all felt the loss of a person whose life we had shared for some days. In addition to this, there was also the stress for many of the staff of working in an unfamiliar work environment. The Australian Defence Force in Australia provides care for predominantly fit healthy serving personnel between the ages of 18-55 years with no provision of care to dependants. Intensive Care in the Australian Defence Force therefore has an operational role only. The staff were therefore not used to the complexities of an ICU nor the moral and ethical considerations that are inherent with sick patients.

The final stressor was that of lack of privacy. It is very difficult to grieve or have time to ones self when you live in a multi bed dormitory or have nowhere to go to get away from it all. As a consequence, many personnel bottled up their anxieties. At first these personnel had few problems. But with the passage of time, it was not long before the personnel who had fought so hard to save the lives of others were now casualties themselves, only this time for some it was to be of Post Traumatic Stress Disorder.

Over one hundred patients were admitted to ICU during our six month deployment with a 20% mortality. Most of these deaths were attributed to the poor condition in which patients arrived in ICU and subsequently died shortly after arrival. However, there were two other patients who I remember fondly and who taught us valuable lessons.

The first of these patients was a young pregnant Rwandan lady whose husband had been killed during the war and herself had been shot by an AK47 whilst shopping in the market square. She had received medical treatment and surgical intervention before our arrival in Rwanda however, following her initial surgery a pack had been left in situ and an empyema developed. A surgical team had removed the pack, but a pseudomonas infection had set in. Because she was seven months pregnant and the obstetric services were minimal, together with our initial lack of ventilators, this lady was conservatively managed until such time as the baby was born. One month after the birth, and with the arrival of our ventilators from Australia, elective surgery was performed.

This lady recovered remarkably well receiving no ventilatory support post operatively. The lesson that I learnt from this lady was that of imposing my western values and culture upon that of another culture. I remember vividly the day this lady finally arrived in ICU. So keen were we to help that I decided to give her a good bath, hair shampoo and the like and make her “feel good”. So I set about washing her hair, applying talcum powder and giving her some hand lotion. At the same time her son was given similar treatment. The smile on her face was amazing. Oh what a mistake! The next morning news had spread across town of the beauty therapy at the Australian Hospital. I arrived at work to find the corridor outside ICU filled with Rwandan ladies all waiting for their hair to be washed and to get some special powder. I somewhat laughed this off, explained it was possible and the ladies left. However, this was only the start. My patient became very accepting of the western culture and when it came time for her to be discharged, she refused to return to the Rwandan public hospital. Everyday she would walk back up to ICU and knock on the door for me. Later she refused to eat and slowly she began to deteriorate. In addition to this she refused to bring her son as she considered that he received too much attention from us and therefore deprived her of that attention. This lady would come and go for the rest of our deployment. She was never happy back in her world and with sadness I realised how my desire for her to be treated like a Western person had introduced her to a culture that was beyond her reach.

The final lesson that I share is that of a three year old boy. Travelling in the fields one day, strapped to his mother’s back, an anti-personnel mine discharged and caught the back of the mother and son. They were carried for seven hours and brought into our hospital. By this stage the mother was in poor condition and suffered a cardiac arrest in the emergency room. She was rushed to the operating room and aggressively resuscitated, however she later died in the ICU, we did not have any Fresh Frozen Plasma (FFP) to give her. Her son lay in the bed next to her in ICU as she died, and quietly we all vowed to ensure this boy lived. At first we only knew him as an orphan and he was adopted by all the staff. Then miraculously his sister was found. He hated “white man” and would cry when he saw us coming or we attempted to attend to his dressings. Initially, he progressed very well and we were conscious of returning him to the Rwandan Hospital as soon as possible where we felt he and his sister would be more comfortable. We would visit him in the hospital every couple of days. Then one day we noticed a sudden deterioration in his condition. He had lost a considerable amount of weight and there were now maggots crawling from his wound. He was brought up to the Australian ward and treated there for some weeks. With very little warning he went into heart failure. Fortunately, we had a visiting paediatrician from Australia on rotation. The patient was intubated and ventilated in ICU. Two days later his condition was critical. His sister kept a vigil. We tried to explain to this little seven year girl, that not only had her parents been victims of the war but now she was going to lose her brother. I came on to night duty that evening and things looked grim.

We were now all prepared for the worst. The paediatrician came and made a final check on the child before retiring to bed and we tucked his sister into the bed next to her brother. In the early hours of the morning, I decided to pull up the rocking chair we had found and carefully positioned myself next to the bed. We carefully removed him from the bed with all tubes attached and I rested him in my arms. I knew that this would have been how his mother would have looked after him had she been here. I waited. Somehow night became day and he was still alive. Not only alive now but rallying. He was discharged to the ward three days later. For the next three weeks he was rehabilitated on the Australian Ward. Two days before our departure, the Red Cross found his Aunt in a remote village and she had arrived to look after the children and take them home. On the day of our departure, he too left hospital. For the first time ever he waved and smiled.

That was Rwanda. There were many highs and many lows. However, overall I believe we made a valuable contribution to many peoples' lives. For my staff and I, we went over naïve, we came home empowered.