Kilimatinde Trust

Update on Burns Unit Project

The majority of the structural work to convert the old ward into the burns unit has been completed, just the final fixings are still needed. New easy clean aluminum partitions and doors have been fitted, these also provide good light into the ward. Hygiene is most important and a new sinks with running water has been fitted as part of the conversion.

The are a number of essential items which still need to be procured, this includes a meshing machine used in skin grafting. Moshi hospital have agreed to carry out on site training with the surgeon in skin grafting when the meshing machine has been purchased. There is also a need for, a washing machine, shower heater, steam cleaner a small autoclave, and other small items of equipment and supplies. The estimate for all of this, (whilst awaiting on final costings) is that a further £4000 needs to be raised.

The care of burns is expensive and many of the patients are extremely poor and have no health insurance. The hospital is a charity hospital and does not charge an upfront fee for admission. They are waiting on a service agreement which has been signed, to help patients through a community health insurance scheme to help in paying for the treatment. The hospital supports people for long periods of treatment knowing they will never receive the cost of the care provided.

The plan is to use Banana leaf dressing on burns patients, which is recommended in a resource poor setting like the one in Kilimatinde. Banana leaf dressings have been well researched and the team have practiced preparing and sterilizing their own leaves from the banana trees in the hospital grounds.

Standards

The hospital are completing their Standard operating procedures and have held practice training exercises for the ABC of burn care. The training resources and standards that are being used are taken from interburns. The trust has supported one student nurse through their training and they will work in the burns unit when they qualify in September.

Operation of Unit

The unit will be able to operate at level 1 facility. (interburns standards for service below)

Level I Service – Basic

• Local epidemiology of burns • Available community support (e.g. schools, NGOs, local media) • Basics of primary and secondary prevention

• Communication, ability to motivate local community

• Basic communication facilities, posters, banners etc • Standardised paper / electronic registry form

Prevention

• Stop, drop and roll • Application of clean cool water to wounds • Awareness of dangerous / bad practices

• Ability to demonstrate principles of first aid

• Simple props for demonstrations such as bucket of waterFirst Aid

• History taking • ABC of immediate burn care • Assessment of other injuries • Symptoms and signs of inhalation injury • Clinical assessment of depth and surface area of burn

• Appropriate history and clinical examination. Ability to prioritise airway (with c spine control), breathing and circulation • Ability to accurately assess size and depth of burn wound and presence of other injuries, including inhalation

• Basic medical / nursing notes, stethoscope, blood pressure cuff, Assessment of patient with burns

• Basic airway management • Jaw thrust, chin tilt, insertion of guedel airway, use of bag and mask. • Insertion of iv cannula

• Guedel airway, bag and mask, iv fluids (saline or ringers lactate)Simple emergency procedures

• Local legal requirements • Availability of local, regional burns services and contact phone numbers

• SBAR (Situation, Background, Assessment, Response) • Clear, accurate and legible documentation • Telephone, Clear communication & documentation

• Local transport options, local burns services

• Patient preparation for safe transport

• Access to transport (taxi, rickshaw, ambulance etc)Safe transport

• Analgesia, cleaning & dressing wounds • Correct positioning • Recognition of burn depth and the progression of changes in appearance • Signs & symptoms of infection

• Basic antisepsis, hand washing • Cleaning wound and applying a dressing. Correct positioning. Assess wound for signs of infection

• Oral and injectable analgesics • Antiseptic fluids and topical antimicrobials • Simple dressings

Fluid Resuscitation

We are also able to carry out good fluid resuscitation using parklands formula and have had success with moderate and deep burns. We don't have an ICU and therefore Major burn injuries need to be redirected to a higher-level facility however the nearest one is 10 hours away

Good nutrition

Good nutrition is essential to enable healing to take place. Often our patients who can't afford medical treatment also can't afford food and we have witnessed over the years hospital acquired malnutrition in our beds. We don't have a nutritionist but through the garden projects and raising chickens we can supplement the patients diet by prescribing food from the garden.

Opening the unit

Following a visit to our link hospital we were made aware of 4 children under 5 who were being nursed with the open method. They were in a very busy overcrowded ward, and their wounds were infected. We have 8 beds and admission bay, a single room and 2 bays taking 3 patients each.

There were 2 cases of 30% plus one 7% and one 18% the hospital Dr asked if we could help them. We agreed to open the unit which is already a much better environment in which to care for them. One patient was discharged as the burn was superficial, one patient is with us with 18% burn of hands and feet. One patient died before transfer and another 33% burn died a day after transfer.

We now understood better just how vital this service is. Our intention in the future is to work together with our neighboring hospital.

Admissions of Burn Patients in Kilimatinde Hospital

August 2016 - July 2017

Age	Male	Female	Total	Deaths
Under 1	1	1	2	
Under 5	4		4	1
5 to 60	2		2	

August 2017 - July 2018

Age	Male	Female	Total	Deaths
Under 1	1		1	
Under 5	5	1	6	1
5 to 60	3	3	6	

Patient treated have between 10 and 35% TBSA although at this point anyone can turn up at the hospital for treatment. Their are other cases treated through OPD and Local pharmacy how many are unknown but many minor burns treated are treated there.

Background and Prevention in 9 villages.

For most admissions first aid has not been administered, though work on prevention and first aid is part of our commitment to providing a burn care service.

During January 2018 and in August 2017, burn prevention and first aid awareness, with information, written in Swahili, about prevention, first aid, measuring size and depth, and when to take someone to hospital following a burn injury, was taught in the Kilimatinde village schools and surrounding villages via health care workers.

Each village is visited on a monthly basis by our Medical Safari Team and have been provided with a register to record the incidence of burns. The recording of incidence has been captured by 2 villages, although the recording is disappointing, awareness raising of burn cases has begun and is continuing.

Challengers:

- Under staffing:
- Caring for the burn case is complex and challenging, to care properly takes time. The hospital manages with minimal staff. One way to try to overcome this problem is to support nurses through training. One student has been supported and will join the burn unit team once qualified in September
- Patient poverty and lack of health insurance
- Need for ongoing support and training
- We need to be able to offer skin grafting to enhance wound healing and shorten the healing time and length of stay to improve outcomes and avoid contractures