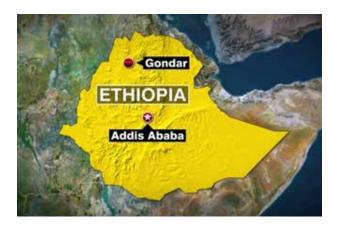


Leicester Gondar Orthopaedic Partnership Final Report

Introduction and Project Aims

In the 1990's Leicester University established a link with Gondar University to promote healthcare delivery and education in Gondar, one of the larger Ethiopian cities situated in the Amhara region in northwest Ethiopia. The city itself has a population c.300,000 but the hospital serves a catchment area of c.5 million i.e. similar to the East Midlands region of England.



In 2014 an Orthopaedic trainee from Leicester, Laurence Wicks, undertook an attachment to the surgical unit in Gondar. It became very apparent that the Orthopaedic facilities and staffing were minimal with an operating theatre built in the 1930's during the Italian occupation of Ethiopia and a single Orthopaedic surgeon with very limited expertise and very basic equipment.



The following year Laurence Wicks returned to Gondar accompanied by two Consultants from Leicester, Alwyn Abraham and Chris Kershaw as well as a plaster technician. Dean Birch. While there they were approached by the senior doctors in the hospital and were asked for help in establishing a modern trauma service in Gondar. The hospital was committed to refurbishing the old operated block and giving one of the Theatres specifically for Orthopaedic Trauma. They had neither the equipment nor clinical expertise to progress the service.

On returning to the UK the group approached Richard Power, a fellow Orthopaedic Consultant but also President Elect of the Rotary Club of Leicester to see whether Rotary could raise the funds to purchase all the equipment necessary to have a fully functioning Trauma facility. (See appendix 1).

Richard Power visited Ethiopia with Laurence Wicks in 2016 to meet the senior doctors from Gondar to discuss the project. This was followed by a further feasibility visit in March 2017 including this time Tim Beacon, CEO of Medical Aid International, a Social Enterprise dedicated to the provision of medical equipment to the developing world, predominantly in Africa. The estimated cost including OR table, anaesthetic machine, power tools, internal and external fixation instrumentation with one year's supply of implants, a portable x-ray machine, a field sterilization unit and sundry items was estimated at c. \$200,000. Some of the equipment was new purchase, some donated, some exdemonstration or pre-owned and refurbished. All shipping and import costs were also included.

It was at this point that the Leicester Gondar Orthopaedic Partnership was formed with the specific aim of establishing a 21st century Orthopaedic Trauma service in Gondar capable of carrying out up-to-date internal and external fixation of fractures. This would include the creation of a surgical team of Orthopaedically trained Consultants, supporting trainees and dedicated Orthopaedic nursing staff. The overall project was set up in two phases: Phase I to refurbish the Operating Theatre and provide the equipment and Phase II to carry out staff training and assist ongoing service development.

The Rotary Club of Leicester agreed to raise the \$200,000 to purchase the equipment through Medical Aid International. This was supported by a Rotary Foundation Global Grant. Gondar University Hospital committed to the building refurbishment and the hospital agreed to work with the Orthopaedic Training scheme at the Black Lion Hospital in Addis Ababa to recruit 3-4 trained surgeons and subsequently trainees. The Orthopaedic Department at the University Hospitals of Leicester NHS Trust agreed to support the training through bilateral team visits. Funding to support this needed to be raised separately through the established Leicester Gondar Link charity, Hale Action Leicester for Ethiopia. A major contribution to support this was received from the Global Surgery Foundation at the Royal College of Surgeons of Edinburgh.

Phase 1

Fundraising

Personal Donations	£40,000
Club Fundraising Events	£15,000
Individual Fundraising	£25,000
Trust Donations	£5,000
Other Rotary Club Contributions Leicester De Montfort and Guimaraes	£10,625
Rotary District Contributions	£10,125
Rotary Foundation World Fund	£52,500

The proposed timeline for this part of the project was for the funding to be raised during the Rotary Year 2017/18 whilst at the same time Gondar University Hospital carried out the refurbishment with a view to setting up the new Operating Theatre in early 2019. The fund-raising was completed on schedule in mid 2018.

Equipment assembly, transport and commissioning

All the equipment was assembled at the Medical Aid International depot in Bedfordshire. Having received assurances that the building works were approaching completion the container containing all the equipment was dispatched and arrived in Gondar in April 2019.





Unfortunately, contractual and financial difficulties between the University Hospital and the building contractors resulted in the building refurbishment coming to a halt until early 2020. In the intervening period the container remained undisturbed on a concrete plinth alongside the Operating Theatre building.

In March 2020 Richard Power, Tim Beacon and Theatre Sister Sarah Shawkat travelled to Gondar to unpack and set up the equipment. At this point the building works, although approaching completion, were still subject to significant dust producing activity. It was therefore decided to unpack and assemble all the equipment and replace it in storage pending full completion of the works and a scheduled training visit combined with official opening in July 2020.













At this point two major events intervened. The first was the emergence of the COVID-19 pandemic, which prohibited any travel to Ethiopia. The second event was the developing conflict between the Ethiopian Federal Government and Tigrayan Peoples Liberation Front. The Amhara region borders on to the Tigray region and as Gondar is the nearest major referring hospital to the border many casualties were arriving in Gondar. As the building work was by this time complete it was agreed that the local team could start using all the equipment even though the Operating Theatre hadn't been formally opened.

In the three weeks November 7th through to November 28th 2020, 126 major orthopaedic procedures were performed.



Phase II

Training and support

The primary objective of the Leicester Gondar Orthopaedic Partnership is to provide a sustainable improvement in Trauma care in Gondar University Hospital. Therefore, simply providing the equipment without ongoing training and support would result in no improvement in service and with most of the equipment lying redundant.

A fund was therefore set up within Health Action Leicester for Ethiopia to support bilateral training visits. This was pump-primed by a grant of \$10,000 (£7,582) from the Royal College of Surgeons of Edinburgh. This was augmented by £7,300 from the Rotary Club of Leicester (excess funds raised) and £3,707.66 from the AO Alliance. A further £4,634.22 was raised through individual fund-raising.