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# The Northwest Orthopaedic Trauma Alliance for Africa (NOTAA): Approaching sustainable development through international collaboration and the Ethiopian and UK Residents Research Day

### Kohila Vani Sigamoney, Henry Wynn Jones and Tony Clayson

The Northwest Orthopaedic and Trauma Alliance for Africa was established, as an approved subgroup of WOC UK, in September 2016 by Tony Clayson and Henry Wynn Jones, both Consultant Trauma and Orthopaedic Surgeons at the Northwest Pelvic Trauma Unit, Wrightington Hospital.

OC UK had enlisted Tony's help with its flagship project supporting development of orthopaedic trauma services in Ethiopia and AO Alliance Foundation had also sought their assistance acting as 'reverse fellows' to support two new Trauma and Orthopaedic Consultants establish an orthopaedic trauma department in Hawassa, destined to be a new major trauma hospital for Southern Ethiopia. Prior to this, basic first aid orthopaedic care was provided in Hawassa but when any specialised orthopaedic care was

needed, patients would have to be taken by their relatives elsewhere. Sometimes this could mean walking for days, the closest provider being Sodo Christian Hospital about 160km away.

Although Ethiopia's infrastructure is developing, health and safety measures are not resulting in an increased number of trauma victims. This usually affects young men of working age who are often the sole breadwinner for the family. Trauma burden is therefore a major public health issue for Ethiopia as it is in many developing countries.



With the support of WOC UK and AO Alliance Foundation. NOTAA was established as a charitable group to enable interested health professionals from the North West of England to utilise their varied skills for the improvement of trauma services in Africa, specifically Malawi and Ethiopia at the present time. This report focuses on NOTAA's work in Ethiopia where its main emphasis is on education and team building, recognising the >>

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importance of establishment of good audit and research methodology as a vital part of the development of surgical services. NOTAA have made six multidisciplinary team visits to Ethiopia since April 2016 and organised three Ethiopian Residents Research Days.

#### The Ethiopian Residents Research Day

The Ethiopian Residents Day is a day held during a planned visit by a NOTAA team where the collaborative work of Ethiopian residents and UK registrars is showcased.

This was an idea suggested by Ms Kohila Vani Sigamoney (UK Registrar, Northwest Deanery) in response to the multiple emails she received from Ethiopian residents, following her visit in May 2017, requesting education on how to carry out audits and research. It was evident that little audit and research work had been carried out in Ethiopia, it was not a part of the orthopaedic curriculum and there was little opportunity to perform such projects. The event was supported to realisation after further discussions with the NOTAA Executive Committee, the NW Deanery TPD, Jaysheel Mehta, the NW Trainee Research Coordinator, David Johnson, AO Alliance Foundation and The John Charnley Trust, with the latter two organisations providing financial support for prizes.

The collaboration relies on international communication. It involves the T&O Registrars, from primarily the Northwest Deanery in the United Kingdom to date, acting as mentors to Ethiopian residents, mostly working in T&O, for about one and a half to three months before the planned Residents Day.

Projects (audits or research) are suggested by either party and then discussed via the internet using email, Whatsapp or Viber. The work is undertaken by an Ethiopian trainee or group of trainees, the findings collaboratively discussed between UK and Ethiopian colleagues and a presentation or poster is then put together jointly and presented at the Residents Day by an Ethiopian trainee. One or two UK trainees join the NOTAA team visit and coordinate the day. Although the parties may never meet in person they can continue to communicate throughout their careers. Ethiopia is a large country and if Ethiopian colleagues are unable to

attend the day they submit a poster presentation.

All presentations are judged on the day by the visiting NOTAA Consultants and the Ethiopian Consultants present at the event. Book prizes are awarded to first and second placed best presenters and the best poster. On the day all members of the winning teams receive a prize certificate and all participants receive a certificate of participation. The UK Registrars involved receive a certificate at their NW Annual Registrars Research Day.

"The first Ethiopian Residents Day was held on 23rd November 2017 at Hawassa University Comprehensive Specialized Hospital (HUCSH) with the support of Dr. Ephrem Gebrehana, Head of the T&O Department."

The Residents Day has been well supported by the Orthopaedic Training Programme Directors in Ethiopia, (Black Lion Hospital and St. Paul's Hospital Millennium Medical College in Addis Ababa) and also Bahir Dar (Felege Hiwot Hospital) namely Dr. Biruk Lambisso, Dr. Zegene and Dr. Worku.

#### Ethiopian Residents Days to Date

So far, three Ethiopan Residents Days have been held over a period of 18 months.

The first Ethiopian Residents Day was held on 23rd November 2017 at Hawassa University Comprehensive Specialized Hospital (HUCSH) with the support of Dr. Ephrem Gebrehana, Head of the T&O Department in HUCSH. The day showcased seven projects (four oral presentations and three poster presentations). Fourteen Ethiopian residents and interns (12 from the BLH programme, one non-trainee from Hawassa and one general surgery trainee) and nine UK registrars were involved.

The second Ethiopian Residents Day was held in the Black Lion Hospital (BLH) Addis Ababa 28th June 2018. Collaboration started two months ahead of the day. This event saw the involvement of 22 Ethiopian Residents (20 from the BLH programme, two from the Bahir Dar programme) and seven UK registrars. There were nine oral presentations and one poster presentation. Kohila Sigamoney worked together with Luke Hughes (UK registrar) to organise the day.

The third Ethiopian Residents Day was held recently at HUCSH on 29th March 2019 and proved even more popular with 26 Ethiopian residents and 10 UK registrars participating. This included residents from Black Lion, St Paul's and Bahir Dar and some Bioengineering students from Addis

Ababa. UK trainees from the North West Deanery and West Midlands participated. Collaboration started three months ahead of the planned date. Sadia Afzal (UK registrar) was the visiting NOTAA trainee who helped organise the event.

Thus the event continues to grow in size and popularity throughout Ethiopia as trainees and trainers across the country are starting to embed audit and research methodology in their training curriculum and clinical practice. >>

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## Aims and Challenges of the Ethiopian Residents Day

The aims of this collaboration have been to introduce audit, research and quality assurance methodology to Ethiopian Orthopaedic trainees and their trainers and demonstrate its role in enhancing patient care and clinical outcomes. The event allows trainees from Ethiopia and UK to work together even if they cannot travel due to time and financial constraints. This activity fosters mentorship and learning with trainees from both countries benefiting. It highlights areas that are good and those that

need improvement in Ethiopian clinical practice and the UK registrars get an idea of healthcare in the developing world and global health issues. The event is fair and does not discriminate based on experience. It is a learning platform regardless of previous involvement in audit and research.

However, there have been challenges. The main challenge is that the internet connection can be unreliable although this has improved over time. There is also the issue of timing and considering when Ethiopian training examinations take place which is presently December each year.

Although feedback revealed some communication difficulties on both sides there is keen interest in Ethiopia and the UK to continue this event on a yearly basis and it has now been confirmed that audit and research methods will be incorporated into Ethiopian training programmes and is now on the agenda for change in designing a new nationally agreed Trauma and Orthopaedic training curriculum in Ethiopia.

The political situation in Ethiopia has at times been a challenge with some occasional unrest and the second Ethiopian Residents Day was significantly affected by this as the location had to be changed a week before the planned event, although it has to be said that the political situation does seem to be rapidly changing and becoming more settled.

#### **Benefits of the Ethiopian Residents Day**

While this event may be regarded by some as another extracurricular piece of work, it has been designed to have wide benefits for training and there is no doubt that Global Health challenges are starting to take centre stage as political issues with trauma in particular are becoming recognised as a major obstacle to economic development and a major humanitarian challenge.

NOTAA remains committed to developing this project further and believe it is vital

that all trainers recognise such importance as trainees do invest time into completing these projects.

For the Ethiopian trainees, they are able to learn how to carry out research and audit, some have been able to present their work at the Ethiopian

Society of Orthopaedics and Traumatology annual meeting, and get opportunities for themselves to be involved in wider research and trials and our winning paper from June 2018 was presented at the COSECSA meeting in Rwanda in December. As this event is approved by their programme directors in Ethiopia, these projects will be of value as they may start to become approved towards their final completion of training as the training curriculum develops further.



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> The third Residents Day brought about more challenges, the biggest being our failure to promote adequately in the UK leading to a shortage of UK Registrars to mentor the growing number of Ethiopian Trainees. This will be addressed in the debrief of the event which will be held mid-year and we are looking to the newly formed Trainees Sub Committee of WOC UK to help NOTAA spread the word as we aim to support trainees and TPDs in other Deaneries to engage with this project.



In the North Western deanery, the training programme director and specialist trainee research coordinator have supported and approved the projects carried out by UK trainees through this collaboration. Trainees have been able to treat these projects as they would projects in the UK. Therefore, these can be counted towards their certificate of completion of training (CCT). If trainees in the UK present it themselves at a national or international meeting or publish it, this also counts towards their CCT.

"Residents Day is an event where everyone 'wins' as both Ethiopian and UK trainees learn and have projects that they can take further. It fosters camaraderie and team work both locally and internationally and Residents in Ethiopia can look objectively at clinical outcomes and take this to their Consultants who can implement change."

The benefits of the Residents Day is that it is an event where everyone 'wins' as both Ethiopian and UK trainees learn and have projects that they can take further. It fosters camaraderie and team work both locally and internationally and Residents in Ethiopia can look objectively at clinical outcomes and take this to their Consultants who can implement change to create improvement.

#### Future plans for the Residents Day and Research Methodology Training

Despite all the challenges, the Ethiopian Residents Day has been looked upon as a successful project that has made a change to the practice of trauma and orthopaedics especially amongst trainees. The programme directors in Ethiopia have asked for this event to continue and AO Alliance Foundation are supporting the delivery of training courses on research methodology in Ethiopia in September 2019 and March 2020.

NOTAA and the Residents Day project has received a commended award in 2018 and 2019 from The University of Manchester for innovation in Global Health Development. The decision has now been taken to hold it once a year, at present alternating between the Black Lion Hospital and Hawassa University Comprehensive Specialized Hospital and there are discussions around it possibly becoming part of their Annual Scientific meeting of the Ethiopian Society of Orthopaedics and Traumatology (ESOT).

NOTAA is looking to establish more teams in the future for support with successfully organising the Residents day in Ethiopia and possibly in other countries. This would involve expanding the project to include the involvement of UK Registrars from other Deaneries outside the North West, subject of course to approval and support from their Training Programme Director.

### Acknowledgements

We would specifically like to express our thanks to Mr Jaysheel Mehta, Consultant Orthopaedic Surgeon Pennine Acute Hospitals/Training Programme Director NW Deanery and Professor David Johnson, Consultant Orthopaedic Surgeon Stockport Hospitals NHSFT and NW Deanery (Eastern) Trainee Research Coordinator for their belief and support in establishing this collaborative project.

Expressions of interest in NOTAA or participation in the Ethiopian Residents Day from trainees, trainers and TPDs throughout the UK are welcome by email to anthony.d.clayson@wwl.nhs.uk or nota4africa@gmail.com.