

**BHIVA - Abbott - SSAT**  
**(BASS)**  
**Exchange Scholarships**  
**2015**

**Evaluation report**

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### **Evaluation report**

I travelled to Harare, Zimbabwe as part of my scholarship programme arranged by Dr Tafara Moga who works for the Elizabeth Glaser Paediatric AIDS Foundation (EGPAF). Dr Mahomva, EGPAF director and Dr Moga provided an overview of how HIV control in Zimbabwe is being achieved and progress so far. I also learnt about the beginnings of EGPAF and how it has grown as an organisation, tackling paediatric HIV infection around the world. There have been major advancements in antiretroviral therapy (ART) provision and more specifically through EGPAF, an impact on mother to child transmission of HIV (MTCT).

‘The WHO estimates  $\approx$ 28 million HIV-positive individuals still need treatment’. In Zimbabwe there have been extensive efforts through the government and external funders to roll out ART to all.

The major strategies employed now focus on four specific areas:

- ART treatment for all
- Reducing mother to child transmission
- Care and treatment programmes
- National TB programme

In 2009 MTCT rates were approximately 30% and in 2014 have reduced to 5.3%. Several strategies have been employed to achieve this, including the World Health Organization’s Option B+. Option B+ offers a simplified approach to ART management in pregnant mothers, where all are offered lifelong ART irrespective of CD4 cell count. In keeping with WHO guidelines all mothers with HIV are advised to exclusively breast-feed and all children born to HIV positive mothers are started on treatment. The rationale for this is that many areas have poor access to CD4 cell monitoring and therefore present late in the course of the disease when it is only clinically apparent. It is also thought to have greater cost effectiveness in the long term, having wider impact as part of a ‘treatment as prevention strategy’. This appears to have been effective when coupled with other initiatives, including increasing access to antenatal care and encouraging institutionalised (hospital) deliveries.

My programme began with a meeting with Dr Mugerungi who is director of the Ministry of Health’s national AIDS and TB programme. It was a privilege to talk with someone so experienced in the field and I gained a valuable overview of HIV/TB management in Zimbabwe. Healthcare is delivered largely via government-run hospitals with large amounts of donor funding supporting the services. There are differing degrees of access to care however, and not all individuals are able to access services that they need. Medications are accessed free of charge but some tests and investigations are paid for, and this can make diagnosis and monitoring difficult.

Historically, HIV treatment has been managed by specialist doctors. In the UK we have numerous doctors but in Zimbabwe the skill set is different. There are simply not enough doctors to deliver specific HIV care. In an effort to tackle this, services have been de-centralised for HIV so that provision is local and delivered by nurses and other healthcare professionals in primary healthcare settings. EGPAF and the

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government work closely, delivering services through an already existing infrastructure, in order to make these services as sustainable as possible. EGPAF specifically train many of the nurses to enable them to deliver necessary care in more rural settings and, as part of my exchange, I visited a number of nurse-led clinics in these settings.

Zimbabwe has also had a public tax in place for some years, which goes specifically towards HIV funding. As 3% of taxes go towards tackling this, I wondered how a tax like this would be received in the UK? Indeed, it is testament to how large the HIV epidemic is in this setting that it warrants a specific tax.

The rest of my week was spent observing clinical activities in a number of central and peripheral hospitals. The skill set available was impressive. Harare and Parirenyatwa were government teaching hospitals that have a large number of highly qualified doctors dedicated to delivering high-quality care. It was really interesting and informative spending some time with these doctors and understanding that despite excellent knowledge, care choices are limited by what your patient can afford and which tests they are willing or able to pay for. HIV is clearly common and doctors are used to treating HIV on a daily basis. Unlike in the UK, all Zimbabwean physicians are expected to be and indeed are competent in the management of ART and HIV complications and there are no specialty trainees in GUM/HIV.

Clinical exposure included observing complications such as advanced Kaposi's sarcoma in a dedicated clinic, which was both fascinating and educational. I had unique opportunities to observe the management of opportunistic infections including TB and infections in children. Doctors worked with limited diagnostic tools and I gained a greater understanding of how complex scenarios including antibiotic resistance and multi-drug resistant tuberculosis are dealt with in settings influenced by local infrastructure and limited resources. My experience in the clinical settings has made me review my practice and encouraged me to revisit my general medical training and understand how relevant it is when practicing in a multi-system specialty such as HIV medicine. I also enjoyed the opportunity to teach undergraduates and was impressed by their keenness to learn.

Limitations with testing and monitoring became an ongoing issue highlighted by many nurses and clinicians. A few clinics were able to monitor viral loads but most were using CD4 and clinical signs to dictate management. ART choice is clearly outlined in the Zimbabwe guidelines as first, second or third line but also dictated by supply issues. If a patient failed all of these available options then things became difficult. Without viral load monitoring and resistance assays treatment choices for these patients is largely directed by clinical experience often without the aid of test results. It highlighted my dependence on these aids within the NHS system in which I work, where the frequent monitoring of patients is the norm and I have the luxury of a large multi-disciplinary team to assist with treatment choices. With dwindling health budgets in the UK I understand that there is also rationalising of our services. A safe and effective compromise needs to be decided upon that meets somewhere in the middle of these two extremes of practice and this experience has enhanced my understanding of these difficulties.

Clinicians are aware that provision and quality of care varies to some degree depending on where you access care in Zimbabwe. All HIV clinics follow clear algorithms aiding the management of patients. Some clinics are annually monitoring viral load and are about to introduce resistance assay machines. The patients attending these clinics are undoubtedly receiving an enhanced service on comparison with more rural clinics. I discussed this with a number of clinicians and it seems all are aware of this disparity and are working towards providing this high standard of care to all but funding and on-going infrastructural issues remain major limitations.

I visited the reference laboratory at Harare Hospital, which included a tuberculosis reference lab for the whole of Zimbabwe. Here they deal with complex resistance and I was impressed with the use of GeneXpert assays and their use to aid diagnosis. Zimbabwe has a high prevalence of tuberculosis, especially as part of HIV co-infection. GeneXpert testing for tuberculosis is helpful when cultures and sputum studies are negative.

A number of services are being integrated to try to minimise at-risk groups from defaulting from care. I spent the morning with AFRICAID at the Zvandiri project. This is a community-based programme that provides prevention, treatment, care and support services for children and adolescents with HIV. This is integrated within the clinical care provided by government and private clinics. Community support workers are often living with HIV themselves and I was in attendance at one of their monthly update meetings. It was wonderful to hear about the work they were doing, providing pastoral support to young individuals in their provinces. Some reports were of recently made homeless children and plans to help. The positivity and pro-activeness that these individuals approached the issues was truly inspiring.

I also attended the Centre for Sexual Health and HIV/AIDS Research Zimbabwe (CeSSHAR) offices to learn about research that is being implemented on the ground. There are a number of projects with at-risk groups that they are involved with as well as a national male circumcision programme. I learnt that in Zimbabwe modelling data has estimated that circumcising 1.9 million men aged 15–49 by the end of 2015 could avert 42% (600,000) of new HIV infections that would have occurred by 2025. This is an approach to HIV management that was novel for me as I don't believe in the UK we have these programmes (mainly as HIV incidence is much lower). I attended a circumcision clinic and learnt that the initiative has been received positively by Zimbabwean men. It has had support from many public figures including celebrities and is being promoted over television and radio broadcasts.

At CeSSHAR I met with Professor Frances Cowan who provided an excellent overview into these programmes and the research behind them. Another 'at-risk' group are sex workers and mobile populations. In 2009 the Zimbabwean National AIDS council commissioned CeSSHAR to design and pilot a programme aimed at these vulnerable groups. The programme was named 'Sisters with a Voice' and the programme has been rolled out across Zimbabwe in the form of four static clinics and numerous mobile sites. The clinic provides free sexual health and HIV testing and support. I sat in on a clinic and learnt about what factors affect these groups. HIV prevalence is much higher in these groups, as high as 80% in some areas. During the clinic I sat in on there were three new HIV diagnoses. The women were then sent to

the HIV clinic for counselling and work up. On talking with them it was clear that they had been unable to access services, or indeed be honest about their work elsewhere, and that 'Sisters with a Voice' was providing a valuable service.

Towards the end of my second week, Dr Moga and I travelled to Chitungwiza to visit a MTCT support group. We spoke with a number of mothers who had been attending the group for many months and it was heart-warming and informative to learn of how grass roots initiatives such as this were providing education and supporting these women.

My two weeks in Zimbabwe coincided with a Wellcome Trust research meeting in conjunction with the London School of Hygiene and Tropical Medicine. This was an invaluable opportunity to gain greater understanding of research conduct and the implementation of evidence-based medicine within resource-limited settings. I attended for a day and learnt about many interesting projects going on throughout Africa and beyond, and was excited to be present during the stimulating discussions that resulted from presentations. I was able to meet a number of the participants and arranged to attend one of the study sites and shadow a researcher for the following morning. This clinician is the study doctor for the Zenith study at the Biomedical Research and Training Institute in Zimbabwe. It was a really useful experience to gain an understanding of what setting up a study involved and how it worked on the ground. It has enabled me to forge connections with researchers in Zimbabwe that I would be keen to pursue in the future.

To finish my two-week placement I was invited to present a case at the Zimbabwe Medical Association's monthly meeting. Once again it was a privilege to meet with so many experienced individuals in the field and I thoroughly enjoyed the opportunity to present a case from the UK and gain valuable feedback from the audience.

Other on-going challenges in Zimbabwe are common to HIV globally. These are issues regarding disclosure, stigma and challenges presented by religious beliefs and faith healers. There are clearly numerous initiatives in Zimbabwe aiming to tackle these, which are encouraging and clearly breaking down barriers to care.

There are services that could possibly be more integrated. Sexually transmitted infection (STI) treatment is largely syndromic and access to contraceptive care and cervical cytology varies. Some clinics had impressive visual inspection with acetic acid and camera (VIAC) clinics for annual screening of HIV positive women, which is delivered well but again there is variation in which clinics are able to provide this service. I considered whether an 'ART home delivery' service, as we have in the UK might translate into high ART adherence. I'm not sure it would. The magnitude of providing such a service where prevalence is so high is simply too large.

Since my return I have had time to reflect on the unique and valuable experience I had in Zimbabwe. I aim to reciprocate such an experience for Dr Moga during the next month in the UK. I look forward to the opportunity to disseminate this information further through departmental/regional meetings and through attendance at the BHIVA conference.