BMS EXCHANGE SCHOLARSHIPS
in collaboration with BHIVA and SAHIVCS 2014

Scholarship Winners' Reports 2014

Report 4: **Mr Asim Ali,**
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Dates and Programme: 11–19 August 2014: Observational placements at Baylor International Paediatric AIDS Initiative, Princess Marina Hospital and Associated Fund Administrators, Gaborone, Botswana.
20–23 August 2014: Botswana HIV Clinicians Society (BHIVCS) Internal Conference

Reason for my interest in the scholarship

I wanted to learn how to manage culturally related adherence issues and stigma and to apply how it is managed in Botswana into my clinic at the Harrison wing of Guy's and St Thomas' NHS Foundation Trust in London.

I also wanted to learn from the success of the adolescent clinic in Botswana and, whilst a different cultural cohort, attempt to adopt their processes and implement them at my base hospital.

Baylor International Paediatric AIDS Initiative (BIPAI)

It was quite overwhelming to witness a waiting room full of children, much like what I'm used to seeing in Harrison Wing department, but with adults. Many of the children were in school uniform highlighting how HIV disrupts their education and general daily youthful routine. Nevertheless, the majority of children were thriving thanks to BIPAI, which offers primary and specialist healthcare and social services to HIV-infected infants, children and their families. BIPAI maintains an annual mortality rate of <1%, equivalent to any Western nation.

Some of the children attended their appointment without a guardian accompanying them and I am not sure if this suggested the considerable maturity they have had to develop early on in life or if there were social issues behind the scenes. If it is the former, this may have been partly due to the Teen Club. The club's aim is to empower HIV-positive adolescents to build positive relationships, improve their self-esteem and acquire life skills through peer mentorship, adult role-modeling and structured activities, ultimately leading to improved clinical and mental health outcomes as well as a healthy transition into adulthood. Teen Club events include large group games, drama/theatre activities, pool parties, safaris, sports and art sessions. Educational components—including topics on HIV education, disclosure, adherence, life skills, college preparation, personal finance management and goal-setting—are also incorporated into the Teen Club events, thereby recognising that the need for a holistic approach is vital to overcome the mental ageing burden the disease has forced upon the children.

BIPAI and Teen Club are within the grounds of Princess Marina Hospital in Gaborone but are affiliated with the Texas Children's Hospital and are supported by two pharmaceutical companies, including Bristol-Myers Squibb who sponsored the scholarship. The environment was welcoming, modern, clean and bright, which was a contrast to the Princess Marina Hospital (government funded). Despite multiple pressures that BIPAI faces, it was inspiring to witness a developed approach to caring for the future men and women of Botswana.

Despite trying, as a pharmacist I was unable to observe patient consultations with doctors, which would have been more akin to my role as a HIV clinical pharmacist in the UK, but not perceived to be the role of a pharmacist in Botswana. I was soon to learn that the perceived role of a pharmacist in Botswana in any sector or speciality was more operationally focused (supply and procurement of medicines) rather than the direct monitoring of treatment or extended clinical services.

In my observation of the operational capacity at the satellite dispensary in BIPAI, I was pleased to witness the strong personable relationships between the patients and families with the pharmacy team (one pharmacist, one intern/pre-registration pharmacist and a technician). The lead pharmacist introduced me to the national treatment guidelines. I watched as they had about three or four patients across the pharmacy hatch sitting patiently as the pharmacists counted their tablets from the previous dispensing and supplied more tablets directly in front of them.

Patients are only supplied one month of medicines at a time due to stock limitations, which for children, took them out of school even though their doctors' appointments were months in between.

Counting the tablets and the use of electronic medicine bottle caps (which record when the bottle was opened each day) were the two main methods of monitoring adherence. If there was a concern with adherence and verified by a detectable viral load count, the patients were referred to adherence counsellors and doctors. Discussions around adherence at the pharmacy hatch were possibly hindered by the lack of confidentiality and this restricted open and honest discussion. There were even discussions between patients and families, which while nice to see stigma barriers appearing non-existent, it did not uphold one of the key goals of the government health board: a patient's right to confidentiality. It appeared patients accepted this as the norm and made me appreciate why some patients in the UK adopt the same approach at a pharmacy hatch already occupied with another patient.

I perceive adherence counselling as a fundamental role of a clinical pharmacist but it must be done in an appropriate environment, such as a counselling room, to ensure privacy. It is understandable why the BIPAI pharmacists would refer 'non-adherent' patients to other healthcare staff with suitable facilities. Also, given the sheer workload that engulfed them, there simply was no time to spend 20 minutes supporting patients with adherence. If patients were not required to collect medication monthly, the pharmacists may possibly have the luxury of such consultations.

On discussion with one pharmacist at BIPAI, it was evident that he was hungry for his role to be focused on clinical pharmaceutical care. Like all pharmacists I met in secondary care, the pharmacist was frustrated and demoralised by the role pharmacists play versus the extended role they could offer if supported.

I spent some time over the next week meeting with the BIPAI lead pharmacist (and other senior pharmacists including the chief pharmacist) identifying immediate areas where they can begin to make a clinical impact with the resources they currently have. One observation is the lack of monitoring for drug–drug and drug–disease interactions, associated with resource limitations. I introduced the lead pharmacist to two free online resources: hiv-druginteractions.org and the Electronic Medicines Compendium for summary of product characteristics. In my day-to-day role in the UK, I utilise both resources, alongside paid resources such as Stockley's Drug Interactions, and use my expert HIV pharmacokinetics knowledge to manage drug–drug interactions. I hope it was not true, but I was surprised to hear that no clinical staff monitor interactions closely, given the extent to which HAART interferes with other drugs. There were dose adjustments provided in the treatment guidelines for the most common major interactions such as with rifampicin. However, the theory behind the documented interactions was not fully appreciated. The lead pharmacist had an increased desire to improve clinically and I hope he continues to utilise these resources, appreciate the theory of drug interactions and provide an improved pharmaceutical care. In return, I believe job satisfaction to improve. Given the turnaround pressures to dispense, staff retention issues and current systems, I think it will be struggle even with sheer determination. Once I developed a bond with the lead pharmacist, he proposed multiple cases for discussion to hear my opinion on how to effectively clinically manage them. It highlighted to me that the pharmacists are capable of being utilised in clinical care and, to some extent, already were. It just needs to be prioritised and supported by other clinicians, sharing workload and knowledge. After discussing the cases with me, the pharmacist learnt the benefit of discussing the cases in a multi-peer approach to achieve a more informed solution. It would be great to see that develop into a multidisciplinary discussion.

Since returning back to the UK, I have remained in contact with the lead pharmacist and will continue to support the development of clinical pharmacy at BIPAI where I can by sharing guidelines, providing clinical advice on individual cases and by providing general direction towards an improved service.

Princess Marina Hospital

At Princess Marina Hospital, I attended the morning clinical meeting where doctors discuss admissions from the night before and other complex cases. The meeting occurred every morning and was attended by doctors (all grades) and medical students. I was surprised that I was the only pharmacist in attendance. Whilst the forum is to discuss diagnostic and treatment management, there was no reason why it could not incorporate pharmaceutical input regarding dose alterations, drug–disease interaction management etc. The current position is for doctors to identify and manage these accordingly.

I was introduced to the majority of pharmacy staff in Princess Marina hospital and had a tour of the small department. There was a very small dispensary with limited drug selection (focusing on TB, HIV and other infectious disease drugs) but it served its purpose. There were several technicians and very few pharmacists. In the dispensary, there was a good workflow system and I was pleased to see a technician challenge an inappropriate dose of antibiotic for a baby, highlighting clinical expertise amongst a broader range of pharmacy staff. Prescriptions would be screened and final checked by one of two pharmacists in the last stage before giving the drugs to the patient. The manpower could possibly benefit from better utilising the skill-mix. Assuming a pharmacist had screened the prescription before dispensing, an accredited checking technician could perform the final check. This would release a pharmacist to provide a much needed ward-level service or focusing on discharges. Looking out into the patient waiting area, there was an overwhelming number of outpatients and discharged patients waiting for medicines. By providing a ward-level pharmacy service, the discharged patients needn't wait for hours after discharge for medication. This would allow the dispensary to focus on the outpatients.

I was grateful to meet one of the clinical pharmacists who devotes about an hour on the medical wards reviewing drug charts. She introduced me to one of the consultants, an Italian ex-pat. I noticed that most senior staff were ex-pats from the first world, predominantly USA and Europe. The consultant assigned me a ward round led by a senior house officer (although usually consultant-led) with the aim of imparting my knowledge to help the team. This experience was an eye opener! There were two medical wards, one for males and another for females. Each ward was full and over-capacity with patients in trolleys in the corridors. A dedicated bay for suspected TB patients was not isolated with negative pressure rooms as I'm accustomed to but the onward transmission of TB was controlled by permanently opened windows in all bays. It was approaching winter and the wards were cold in the mornings! This method of TB prevention was all that was possible, given the resources. The need for improved TB screening and triaging was highlighted at the Botswana HIV Clinicians Society conference as patients were often admitted into hospital without TB, but prevalence increased considerably post discharge within a year.

On the ward round, it was clear to me the SHO leading the ward round was not familiar with a pharmacist attending or their role on a ward round. As a result, I felt in the way and so I took a backseat in observing, allowing the medical students to dominate the observations. Upon making suggestions from a pharmaceutical point of view, I noticed some hostility as a result of an unfamiliar expectation of my role. My suggestions were accepted eventually and my input was subsequently sought. I think I surprised the SHO with my 'basic' knowledge especially when I challenged the pharmaceutical treatment plan for an old, previously undiagnosed, ischaemic stroke in an elderly lady. There were a number of unnoticed drug interactions in many of the drug charts and this was probably the result of the one pharmacist who visited the wards not being able to review all charts in the time allocated – a problem that also occurs in UK hospitals. The junior house officer was quite inquisitive of my clinical opinion, which was wonderful. If the consultants of the future could see the benefits of having a pharmacist on the wards after spending a couple of hours with me then I imagine pharmacy involvement on the wards will develop for the better.

I felt that having a permanent pharmacist on the wards, attending the ward rounds and morning meetings, doctors would become more accepting of pharmacists and would quickly rely upon them. In my short time on the ward round, I broke the hierarchal barrier and created a need and desire for an MDT approach in patient care with this team. It may have been temporary but I knew it was possible to sustain given the chance. The eventual result would be shared workload, greater patient care and a more positive patient outcome. It would be interesting to audit mortality and morbidity pre- and post-pharmacist review. Mortality was higher than I'm used to seeing and I could not help thinking many deaths were avoidable. Many believe that due to a high mortality rate, there was a culture of wide acceptance (from family and clinicians) of poor outcome. An example of this: I sadly heard about a 23-year-old girl who just died of 'oesophageal candida'. The doctor highlighted to the team of medical students that nobody should be dying of fungal infections especially young patients but quickly dismissed the case to focus on the ward round. Whilst she recognised this was potentially an avoidable death, there was a pressing need to review the remaining patients on the ward round. A post-mortem may have revealed the true cause of death but in this case, the family abandoned the patient at the doors of A&E and so permission could not be sought. Lack of clinician accountability for avoidable deaths and malpractice was a taboo subject that was recognised and discussed at the conference.

Whilst I witnessed some easily resolvable flaws in inpatient care, I fully appreciated that in such resource-limited settings, the doctors worked extremely hard in a very stressful environment to treat who they can. I left the ward round with a heavy lump in my throat. It made me appreciate the success of the NHS and my pharmacist role in patient care – a necessity for the NHS but a luxury in Botswana.

I talked about stock-outs with the pharmacists – a common issue possibly resulting from the limitations in stock ordering and procurement systems to and from a centralised drug store in Botswana – the only supplier of drugs. Whilst there may not be control over drug availability from the central Botswana stores, the ordering requirements from the central stores were major barriers to adequate stock in the hospital. Quantities for the hospital were based on the previous month's usage of a drug rather than on the professional judgement of the hospital pharmacy or the demand for a drug in real time. However, these requirements were in place to reduce the vast quantities of expiring/wasted drugs in the hospital.

One case was mentioned when ritonavir was out of stock. For most patients this is not a problem as first-line therapy is the generic version of Atripla followed by Truvada plus Alluvia (also known as Kaletra). In this case, a patient was on salvage therapy (Truvada, atazanavir and ritonavir) and to overcome the ritonavir stock problem, the patient was given Alluvia to take with the atazanavir to boost it using the ritonavir in Alluvia. However, the patient was asked to take Alluvia twice a day despite the atazanavir dose being once a day. This case clearly shows lateral clinical thinking and resourcefulness but possibly also a limited understanding of pharmacokinetics and pharmacodynamics. The patient could have temporarily switched to Alluvia (without atazanavir) until the stock issue resolved or if atazanavir was necessary, then one dose of Alluvia at the same time should have been sufficient.

I spent some time with the Infectious Disease Care Clinic (IDCC) Pharmacy – a unit not too dissimilar to the BIPAI and Harrison Wing at St. Thomas' hospital, except with a considerable number of patients. IDCC was in set up to manage complex HIV. A clinical pharmacist, a few intern pharmacy students and a technician ran it. The technician dispensed and issued direct to the patient without pharmacist involvement, which meant technician-led dispensaries were possible and thus releasing pharmacists to undertake clinical pharmaceutical care on the wards. Patients attending here had a one-to-one adherence review and counselling with the pharmacist during dispensing. Often, other patients would come and sit at each of the booths when already occupied, much like BIPAI. I had the opportunity to take one of the patients to a private room to have a consultation. At the booth, I felt the patient was not being truthful regarding her adherence because of the other patient present. In the private room, I did not ask her about adherence. I simply explained the importance of adherence, the consequences of not being adherent (e.g. resistance, disease burden, pill burden). Now she had all the pertinent facts regarding adherence, and could make an informed decision. The patient opened up, admitting to non-adherence but felt she could not admit it earlier in case she got in trouble from healthcare staff. She also admitted to not knowing the full consequences of non-adherence and vowed she will do her best in the future. Her current adherence issues were associated with not being able to look after or medicate her HIV positive child whenever she herself took Atripla. By consulting her from a different approach, I identified her intolerance to Atripla, which directly affected her adherence and supporting her child. The patient was subsequently referred back to the doctor with this new information for a treatment review. This case highlighted that even in this specialist HIV setting, confidentiality was important as well as satisfactory consultation time – a luxury that IDCC cannot currently offer.

I also had a meeting with the chief pharmacist to discuss my experience at Princess Marina hospital and if I had any recommendations. I highlighted that after meeting the pharmacists, common desires existed: to enhance their role towards clinical pharmacy; career development and progression; and post-graduate training. A common opinion amongst the pharmacy staff was that there was poor investment in pharmacy services and as a result morale was very low. This was echoed after a request for cytotoxic spill kits (for the safe operator handling during cytotoxic drug preparation) and drug trolleys to assist in near-bed discharge dispensing. Neither requisition had been fulfilled. Pharmacy staff who were expected to work in such conditions sadly feared the consequence of whistleblowing based on previous experience of employment termination. Thankfully, following the Francis Report NHS staff do not need to work with similar fear. I left this meeting feeling deflated at the thought of the challenges ahead to establish clinical pharmacy when basic human/employee rights were potentially being violated. However, the chief pharmacist was enthusiastic to open collaborative links to make positive changes where possible and we discussed immediate solutions to some of the problems. I hope to hear from the chief pharmacist in the future so we can open successful support channels.

To complete my time at Princess Marina Hospital, I presented at the grand round to the doctors explaining my role as a HIV pharmacist in London. I hoped that it might give inspiration to them to seek similar support from their pharmacist colleagues in the hospital.

Associate Fund Administrators (AFA)

AFA were involved in private healthcare where they ensure that the funding provided by companies for their employees health was utilised appropriately. I immediately noticed a huge difference in comparison to any other area I shadowed. The modern office building housed five clinical pharmacists – more than all of Princess Marina Hospital. They had a strong patient–practitioner practice where much more time was dedicated to each patient. Many of the patient consultations occurred on the phone but some also happened face-to-face in the AFA office, depending on the patients' convenience. The team was organised and they divided the tasks at hand – everyone knew their roles.

I met Itireleng, the pharmacist scholar who will be coming to London in October. Her role was to focus on complex patients with chronic conditions (not specifically patients living with HIV) – those who are failing, on third-line therapies, complex drug interactions, resistance etc. We spent some time discussing the cases she was dealing with and found similarities in our approach to managing the problems, often negotiating with the prescriber. I also got to spend some time counselling patients and the counsellor learnt new counselling techniques from myself which I had not realised I use until she pointed them out to me. Likewise, I learnt from her, in particularly, her engagement and demeanour with patients. As most of the counselling was on the phone, it was difficult to gauge the patient without being face to face but the counsellor managed this very well.

In private healthcare, there were no prescribing restrictions as long as it was evidence-based. However, treatment can only be initiated if the appropriate funds were in place to continue treatment full term or if there was a clear plan for the government to take over care. Private healthcare was not as it is in the UK. It was more an assistance for the government-funded healthcare. Often they worked closely together to provide quality healthcare for patients who could not have the appropriate treatment in hospital, e.g. certain cancer therapies. AFA, for example, fund the drug but the budget may not support the administration and peri-treatment support and the hospital steps in to administer it.

The AFA was pioneering in their approach to healthcare. The role of pharmacists was very advanced and I believe it would be a great opportunity for AFA pharmacists to work with hospital pharmacists and bring about a change in pharmaceutical care across the board. I am hoping that Itireleng will see how UK pharmacists are integrated into healthcare and work across interfaces, thus planting a seed of hope and inspiration to make a change in Gaborone.

The Botswana HIV Clinicians Society (BHIVCS) International Conference

The conference takes place every two years with speakers from all over the world focusing on HIV in Africa. The role of the scholars this year was novel. We participated by rapporteuring various sessions for the official conference report. In addition, we set up a new Twitter account (BOTSHIV) for the BHIVCS, formerly the SAHIVCS, and tweeted live feeds throughout the conference, capturing the key points made by the speakers, panels and audience. The Twitter feed was extremely successful and had very prominent followers who retweeted many of our key points, including BHIVA, Nelson Mandela (official account), several universities, charities, clinical societies etc. The tweets also trended in Africa on the #BOTSHIV2014 trend. It was one of our greatest achievements on the scholarship that BHIVCS had their own account in advance of several speakers stating that social networking was the way to reach the current generation. I intend to continue to support the Twitter account until the society is ready to take full control and utilise it further for their day-to-day messages.

I was pleasantly surprised by the professionalism of the conference, which was as good as any first world conference. I would say it was probably more inspirational as it tackled key issues such as stigma, taboo, professional accountability, horizon scoping and inspired the audience to make easy but powerful modifications in their current approach. The speakers were inspirational and included former Botswana President, Festus Mogae, who led the advancement of HIV care in Botswana – a model that many African countries have since adopted. There was an abundance of passion to improve HIV outcomes in Africa from speakers and more so in the audience. Joep Lange was also recognised for his contribution to HIV care with a 10-minute commemoration. BHIVA's very own Mark Nelson presented and entertained the audience in the way he is known best. Other entertainment included a very lively traditional dance group and a feast.

I also met with an interesting researcher (Naom Angrist of Young Love Group) who is conducting research in HAART adherence for adolescents and in particular, the power of text messages. We exchanged details because I am currently auditing the same topic in my cohort in London. We hope to share our ideas and results and Naom

was particularly interested in the medication aids supplied by pharmaceutical companies such as medication key rings and pill boxes.

For my duties at the conference, I was given a vase gift, which was a special touch. I was grateful to be a part of it and saddened that the conference brought an end to my enjoyably fulfilling and eye-opening scholarship.

Summary

I would like to thank BHIVA, SAHIVCS and BHIVCS for presenting me with this phenomenal experience. I truly am grateful for the scholarship and it has left me inspired to work together with the great people of Botswana. I further extend my gratitude to the inspirational people of Botswana – Dr Matshediso Kgamane (Chair of BHIVCS) for hosting us in her own home and giving us a taste of her glamorous lifestyle; Tshepho Kgabontle (lead pharmacist for BIPAI) for his enthusiasm and warm welcome to BIPAI; Dr Brighid Malone (conference lead) for her support and encouragement; Dr Lesego Kuate for keeping us very entertained and full of laughter; Tuelo Ramaola (AFA Pharmacist) for putting together my interesting programme in Gaborone; and finally Itireleng Mokhati (awarded scholar pharmacist coming to London in October) for looking after me, inspiring me and the pressure is on to return the gesture.

My aim for the scholarship was to develop new ways to engage with patients who are non-adherent to HAART partly due to cultural differences. I realised that we share the same challenges in Gaborone but defined by resources. The clinical staff in Botswana made the most of these resources to serve their population in the best way they can and this was very inspirational.

In light of the resource limitations, the on-going battle with increasing patient numbers, greater demands, stress, frustration and low levels of staff morale, I was inspired to see staff maintaining a great rapport with their patients and conversations between patient and healthcare worker was always with equality, humanity and mutual respect for each other.

On the flip side, it was disheartening to hear the opinions of the pharmacy staff who work extremely hard but feel frustrated from lack of career development and investment in pharmacy services. They also feel there is no recognition of what they can actually achieve to significantly improve overall patient care. I believe this plays a significant role in problems with staff retention, where there are no apparent added incentives for working in government hospitals with salaries lower than those in the community with similar roles. Additionally, in the private sector such as AFA, job satisfaction is greater and a more comfortable experience. Pharmacy interns are required to spend their first year before gaining their licence working in a hospital but most move on to other sectors. As a result, the remaining 3–4 clinical pharmacists have to cover more ground and extended clinical service falls victim to this. This has a further consequence, as clinical expertise will fade over time if not used. It is highly commendable of the hospital pharmacy staff who continue to work in such circumstances and it shows their selflessness and desire to care for patients at the heart of acute medicine.

What I will take away from my experience is a realisation: the need and desire for creating collaboration between the UK and Botswana. Realistically, I know this is no easy feat but I can only try, starting with my base hospital. I hope other hospitals in the UK become inspired to support colleagues as part of our joint global responsibility to end HIV.

On a lighter note, I accomplished a bungee jump off Victoria Falls Bridge between the borders of Zambia and Zimbabwe (fifth highest bridge jump in the world) as my #icebucketchallenge for Motor Neurone Disease Association. This had to be the greatest achievement of my life, given my sometimes-crippling vertigo. I walked the bridge for three days just to build up the courage and managed to film it all! I also had two out-of-this-world safari experiences – one in Madikwe (South Africa) and the other in Chobe (Botswana). I fortunately saw all animals from Disney's Lion King, my childhood favourite film, including Africa's big five. The animals included white rhino, lions, cheetah, leopards, giraffes, elephants, hippos, crocodiles, zebra, wildcat, antelope, birds of prey, emus, buffalos, wildebeest and many more. Given that some animals are near extinction due to poaching e.g. under 5000 rhinos in the world, going on safari as soon as possible is a must for anyone. Little beats a sundowner drink during the phenomenal African sunset or camping in tents amongst the wild animals with no boundaries underneath the bright Milky Way above. Utterly beautiful!