Reflections on a year with COMDIS Swaziland

Philip Daniels

I came to Swaziland during a period of change. Looking back through previous registrars' reports, it is clear that change is a feature of any stay at GSH, however, the rapid change within GSH and Swaziland as a whole were to significantly impress upon me during my stay.

Good Shepherd is restructuring and looking to expand. Moving away from a structure with the Senior Medical Officer at its apex, the hospital has developed a management board comprising of Matrons, the Finance and Human Resource Directors and the Chief Executive Officer. This board has final arbitration on any decision made within the hospital and needs to be consulted when research studies are being designed and reported.

In addition, the hospital is seeking to expand its premises- A waiting mothers' area has been built, the eye hospital secured funds from the German government to double its footprint and the hospital developed plans to expand the Out-Patient Department (OPD), bringing in a new CT scanner and Intensive Care Unit (ICU).

Regionally, the Public Health and community clinics have undergone dramatic change. A new cadre of Senior Sisters was deployed to supervise clinics. These appointees will oversee operations in clinics, doing much of the ongoing mentoring and ensuring systems are operational. They therefore represent an important stakeholder for COMDIS, as well as significantly bolstering the position of the Regional Matron.

New provisions also came on line in the region. Lubombo Hospital, built as the regional referral hospital and in the process of building wards, opened in clinic form. The facility at Sithobela, in the south of the region was upgraded to a hospital and began to initiate Multi-drug resistant TB patients, as well as other doctor-led services.

At the same time, international organisations such as the Clinton Health Access Initiative (CHAI), Medicins San Frontiere (MSF) and the University Research Committee (URC) were increasing the number of programmes being piloted and delivered through clinics.

Nationally, Swaziland was doing much to develop the health sector and beyond. The Essential Healthcare Package, developed in 2010 and specifying what services can be expected at each level of service provision (from community up to international referral), was finally being implemented.
Programmes such as the Swaziland National Aids Program (SNAP) and the National Tuberculosis Control Programme were solidifying and maturing in their outputs, whilst, some, such as the Non- Communicable Disease (NCD) program, were still to develop complete stability. Free healthcare for over 60s is now available at government facilities due to an edict by the Queen Mother and a new electronic Health Management Information System (HMIS) is being installed to enable real-time monitoring of health informatics across the country.

More widely, Swaziland is racing to achieve King Mswati's 2022 vision of a "First World Country". Road and palace construction is in full swing. In addition, new research guidelines were produced meaning that international researchers would need to seek permission from a National Research Committee to commence research and pay a significant sum for the privilege of doing so.

It was change for me, of course, too. New country, new language, new workloads.

The projects I was to work on were the decentralisation of Non-communicable disease support (specifically Diabetes and Hypertension) and Support for patients with Multi-drug resistant Tuberculosis. The workload, however, was far more diverse...

Essential Healthcare Package

The Essential Healthcare Package (EHCP) can be found here. It outlines what services should be available at each facility, tying in with the Referrals and Linkages Framework and the National Standard Treatment Guidelines and essential Medicines List.

In effect, it describes an ideal heath system for Swaziland, where patients, providers, practitioners and planners are aware of what is available and effective upwards and downwards referral pathways mean that patients are seen where and when they need to be to ensure best outcomes for the population.

I was involved in developing the tool for the Service Availability Mapping (SAM). Working alongside CHAI and the Swaziland Ministry of Health, a questionnaire was developed to outline what currently exists within each health facility. If the EHCP is the vision of what is to

come, the Sam is a snapshot of what is here now and crucial to developing an effective implementation.

Future registrars would be well advised to work closely with the EHCP lead, Violet Buluma, to ensure they remain updated on how health systems are developing in Swaziland and shape system wide change.

Infection Prevention and Control (IPC)

Previous registrars have worked tirelessly to shape IPC within Good Shepherd Hospital. It is still an area that warrants considerable attention. My work has included convening and developing a Terms of Reference for a hospital wide IPC committee, ensuring that committee meets, instigating, with the College of Nursing, a participative handwashing study and marking International Handwashing Day with a hand hygiene event including training for hospital staff and visitors.

Future registrars should continue to work with the Committee and the IPC team. IPC is not an outcome but a process, requiring ongoing attention and commitment. It won't be "solved", but it can always be improved and the Hawthorn effect is powerful, even if individual interventions seem ineffective.

Student Nurse Lindokuhle Mhlongo demonstrates good hand hygiene to a patient during International Hand Hygiene Day

Non-Communicable Diseases (NCDs)

The decentralisation of NCD services was a major part of my time and learning in Swaziland. According to the WHO, 80% of chronic disease deaths occur in Low and Middle income countries and people living with chronic disease in in such settings lose between 10-20 years of life as a result to their disease not being controlled.

COMDIS has been working to decentralise NCDs, particularly Diabetes and Hypertension. Building on the work of previous registrars to develop study and training materials, my tenure saw study materials and equipment distributed to intervention and control sites, teams trained, including

supervisors, and mentoring commenced.

Sister Sweetness mentoring a community clinic nurse on NCDS

In 2014, approximately 400 people in Lubombo were identified as having diabetes and/ or hypertension. Within six months of recruitment for the current study, approximately 2100 patients have been recruited and initiated on treatment. Clinics have been found to cope with decentralisation well and, beyond needs to address doctor led outreach and drug availability, the pilot has worked well. Pending formal results, the pilot should inform national roll out of decentralised NCD support.

Future registrar(s) will need to collect the control site data (due to run 3 months longer than intervention) and oversee the data input, analysis and write up of the study. As the project moves into the roll out and dissemination phase, future work will include the continuation of clinic mentoring, pulling together the resources that exist (GSH, Sithobela, URC etc).

The NCD study has also highlighted other interesting areas of work. We will be working with Diabetes Swaziland to develop digital stories about Swazis living with chronic disease. In addition, future work includes working with partners to address mental health needs in the country.

Swaziland currently has high, unmet, mental health needs. Poor provision in local areas mean that mental health issues, often co-morbid with HIV / TB and their treatments, are not picked up until the acute stage. Patients are then routinely “patched up” at the National Psychiatric

Hospital, before being returned to their communities, where cycle starts again. Jen and I worked closely with the national Psychiatric Lead, Dr Violet Mwanjali. Taking as a starting point the newly produced National Psychiatric Guidelines, we collectively developed a comprehensive Mental Health Deskguide for Swaziland. This went through multiple revisions, including a three day workshop with professional stakeholders from across all regions or Swaziland and considerable staff representation from the National Psychiatric Referral Hospital. Following significant editing, we obtained funding from COMDIS and Peace Corp to publish 500 copies, for distribution in health facilities.

Future registrar(s) should build on this, pushing for improved mental health training for Clinic Nurses. Equally of note is the team co-locating in the refurbished VCT block. With a critical mass of metal health trained staff in one place, there is significant potential to support the psychosocial needs of patients attending the GSH HIV and TB clinics.

Eye health screening is another area addressed within my tenure. Swaziland is a signatory of the Vision 2020 agreement to end preventable blindness by the year 2020. Vision loss is often exacerbated by other NCDs and their sequelae, such as diabetic reinopathy. I provided support to a successful bid to expand the eye clinic at Good Shepherd and begin training of Rural Health Motivators to conduct vision screening within communities as a method of detecting cases at an earlier stage and facilitating effective treatment. I also supported the innovative automatic call back system that the clinic has developed to alert patients of upcoming appointments

Future registrars would do well to work closely with Dr Pons and his team, as they have significant experience of delivering high quality care within Swaziland.

TB, including Multi Drug Resistant TB

MDR (multi drug resistant) TB is the name given to TB when the bacteria that are causing it are resistant to at least isoniazid and rifampicin, two of the most effective TB drugs. The prevalence of TB in Swaziland is amongst the highest in the world. Approximately 80% of tuberculosis patients are also infected with HIV/AIDS and there is a high prevalence of multidrug-resistant tuberculosis. At a national level, efforts to expand tuberculosis prevention, detection, and treatment are led by the National TB Control Programme (NTCP).

COMDIS and its antecedents have long been involved in supporting efforts to address TB within the country. COMDIS is currently involved in assessing the decentralisation of MDR TB detection and treatment, from GSH, to community clinics. The decentralisation project has seen the development of MDR-TB guidelines for GSH and the region, training of clinics and the running of two MDR-TB clinics per month at GSH.

According to the guidelines, patients should be identified via active and opportunistic case finding screening in the community and at clinical sites. Patients identified as having Drug Sensitive TB (DS- TB) will be initiated via their local clinic. Patients identified as having (M)DR-TB will be contacted by the TB team, a home visit will be made to by the outreach team to identify distance from the nearest clinic and infection control concerns. A decision will be made at this point whether to initiate the patient at the National TB Hospital at Moneni, or to decentralise the patient to initiate at GSH or Sithobela.

One of the new community Bicycle TB screening Officers

Contacts should also at this point be screened. The WHO has developed Recommendations for investigating contacts of persons with infectious tuberculosis in low- and middle-income countries (WHO, 2012). These suggest that a person living with HIV (PLWHIV) has a 28.4% (9.8-59.2%) risk of developing TB if they live with an active case.

Patients who are initiated o MDR-TB treatment at GSH or Sithobela visit the hospital monthly to pick up their medication, for clinical checks and to receive health education, alongside their family and/or community treatment supporter who oversees the provision of Directly Observed Treatment Short Course (DOTS). During the initiation phase (approximately 8 months) patients visit their local clinic daily for injection. In the continuation phase (approximately 14 months) , patients visit their local clinic in the morning to take their tablets and take their afternoon dose at home, in the presence of their treatment supporter.

Work during my tenure has been hosting of regular Technical Working Group meetings, undertaking an audit of contact tracing, conducting an interview study of stakeholders (professionals, patients and treatment supporters) and devising a joint outreach schedule for the TB, ART and NCD teams.
Staff buy in was also secured from GSH radiographers to provide twice annual chest X-raying of MDR patients, from a renovated room in the TB unit.

Overall, patients tolerate decentralised treatment well. A number of patients cite the expense and inconvenience of visiting hospital monthly and clinics daily, however, this is preferable to being removed from their families. It is worrying that the contact screening audit showed that contact screening is not being undertaken, potentially leading to significant infection of persons living with infectious cases. In addition, the context of decentralisation has changed markedly since the pilot was planned. There are now six gene expert labs capable of identifying MdR-TB in Lubombo (up from one at the start of the project) and Sithobela has

come online as an initiation site (GSH was initially the sole decentralisation hospital. In addition, Medicine San Frontiere have begun running a fully ambulatory treatment regimen, with significant psychosocial support for patients, that is just nine months in duration.

Future work will involve analysing and writing up the pilot findings. Crucially, a future registrar will need to work closely with TWG members to maintain the momentum around MDR-TB provision. It is especially important that the issue of contact tracing is addressed and that the programme continues to develop, in the light of the COMDIS and MSF study findings, to best support patients and their families and to control MDR-TB in Swaziland.

Adapting to change in Swaziland

UK health professionals have been coming to GSH for many years. In that time, enormous things have been achieved. The first decentralised DOTS in Africa, the introduction and decentralisation of essential anti-retro virals (ARVs), the construction of a TB unit. Current and future registrars build upon that work.

It is important to note, however, that the context and its actors constantly shifting. Once AIDS and its co-infections, particularly TB, were ravaging the country. HIV prevalence remains at an international high, however the availability of ARVs and the strengthening of the TB program at the community level have meant that mortality has drastically reduced. Swazis want high quality universal healthcare, available locally and able to meet their needs, from the Gogo (granny) with diabetes to the Bosissi (young women) in sero-discordant relationships who want to safely conceive and raise a family.

My work whilst in Swaziland involved acting as an honest broker between GSH in Swaziland, Leeds and Bradford in the UK and, latterly, Peace Corps- the American Government International volunteer organisation.

The contract between GSH and COMDIS was no longer valid. Working with Anthonia in Leeds, we brokered a memorandum of understanding, with COMDIS paying GSH a monthly management fee and GSH providing additional support in terms of HR and finance. This was finally signed off by the CEO, following extensive discussions with the Hospital Management teams and a visit by Anthonia.

Future registrars should continue to work closely with colleagues in Leeds band GSH to strengthen the engagement between the two organisations, capitalising on and sharing the skills and expertise that exist in both settings, through strengthening of research capacity, supporting shared seminars and research projects and keeping each setting informed as to the context and needs of the other.

Matron Futhi- Community Matron and "The Boss"

We also secured a third year Peace Corp volunteer from August 2016, drawing heavily on the experience of Jen, our current volunteer. This person will provide support for COMDIS', bringing extensive experience of working in Swaziland and working alongside the registrar to develop and deliver projects. Housing was secured and arrangements were made for their formal affiliation with GSH, through the signing of a MoU between GSH and Peace Corp.

Future registrars will need to continue to look for ways in which multiple organisations, their skills and resources, can be brought to bear in shared interest.

Funds were also secured for the refurbishment of the Voluntary Counselling and Testing (VCT) block, which will now see integration of the Mental Health/ Epilepsy, the NCD (Diabetes and Hypertension) and VCT teams. With HIV testing available in all wards and clinics in Swaziland, VCT provisions, once vital, have been superseded. Re-fitting the unit, through the securing of a generous donation of E 100,000 will enable the integration of a multi skilled team, offering a supermarket approach to clinic visits , where skills can be shared and developed staff can backfill for absences, increasing access.

A future registrar will need to scrutinise the process of refurbishment and integration, ensuring that the conversion goes to plan and budget, that staff are suitably involved and that training and support for the newly integrated team is available from national, regional and local partners. There is, however enormous potential through this integration to improve clinical and psychosocial support for patients, not least from the adjacent TB and HIV units.

As stated, Public Health Registrars act as an intermediary between the team in Leeds and professionals in GSH and Swaziland as a whole. Additional tasks during my tenure included revising risk assessments and lone working procedures for COMDIS staff working in Swaziland and representing GSH/ Swaziland, alongside the Community Matron, Futhi Ndzinisa, at the COMDIS research workshop in Dubai.

Future registrars should realise the importance of their role to communicate effectively between researchers in the UK and practitioners and patients in Swaziland. This advocacy works in both directions and is best achieved by the registrar developing effective working relations with multiple stakeholders in both settings, recognising that the most effective method of change is not always the most direct and that working through and with others is key to realising the best outcomes for all stakeholders.

A workshop with partners to design a decentralised ARV provision in a local factory

The Hard Bits

If it was all easy, it would be done.... There were aspects of the year with which I struggled.

Working remotely from the COMDIS team was often a challenge. The COMDIS model is that of a central academic hub, in Leeds, which provides expert support to partners, who undertake research on COMDIS' behalf. In the course of the past decade, these partner organisations have grown, such that they are increasingly financially and operationally independent of the Leeds team.

It is a testament to the effectiveness of COMDIS and its antecedents that constituent partners have increased in size, with each (Nepal, Bangledesh, Pakistan) numbering some 70 staff. There is an growing theme within the consortium that these organisations will collaborate with each other directly , with or without input from Leeds. On a number of occasions, it became painfully clear to all parties that COMDIS Swaziland has not developed in tandem with other partners. COMDIS Swaziland is not an organisation. It is an individual. Balancing need and opportunities against my personal capacity to fulfil them presented a frequently precipitous learning curve.

In addition, as with any team of experts, individuals cannot hope to be experts in everything. In the case of the Leeds team, there is a tendency for the academic staff not to get "involved in the detailed planning" and for administrative and management staff not to get involved in the research. Given that the role in Swaziland demands that one manages research projects, a budget and staff, this often led to tensions with the team in Leeds.

Inevitably too, the high turnover of registrars and the detached position of Leeds staff means that the role of registrar as interlocutor is vital to ensure that there is clear, frank and unambiguous discussion between partners. I would like to think that this was one of the areas that moved on significantly during my tenure, with renewed and strengthened relationships developing between Leeds and GSH management.

That said, the support from Leeds was frequently well beyond that which could be reasonably expected and I leave with the Utmost respect for my academic colleagues.

I was fortunate in having experience of managing a staff team. Some of these interactions were difficult. Aligning people's personal ambitions and interests with that of COMDIS, particularly given the tensions that exist(ed) between COMDIS, GSH and other partners in Swaziland, was incredibly challenging. It highlighted to me a need to develop my competence in management.

Reasons to be grateful

If I had my time again and I knew what I know now back then, I would like to think that I would take more time, consider more, but ultimately learn as much from the mistakes I would inevitably make.

I am indebted to the patience of colleagues and friends who shared their knowledge, wisdom and grace. There are some that I owe in particular; more than it would be prudent to list. Thank you. Ngyiabonga Kakhulu, Sale Kahle.