

Bugs & Drugs: A year in Swaziland



Good Shepherd Hospital, Swaziland, Specialist Registrar Attachment

**September 2007-September 2008
Dr Kerry A Bailey**

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Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal clinics
ART	Antiretroviral therapy
ARVs	Antiretrovirals
COMDIS	Communicable Disease – Nuffield
CD4	Surface protein on Type of T cell, lymphocyte measured by blood test to estimate extent of HIV
CXR	Chest X-ray
DHS	(Swaziland) Demographic and Health Survey
DOTS	Direct observation treatment strategy
EJAF	Elton John Aids Foundation
FBO	Faith Based Organisation
GDP	Gross domestic product
GEM	Gender Empowerment Measure
GHDR	Global Human Development Report
GIPA	Greater Involvement of People Living with HIV and AIDS
GSH	Good Shepherd Hospital
GP	General Practitioner
HDI	Human Development Index
HIV	Human Immunodeficiency Virus
HPI	Human Poverty Index
MAO	Motorcycle Adherence Officers
MIC	Middle-income country
MOHSW	Ministry of Health and Social Welfare
MDGs	Millennium Development Goals
MDR/XDR	Multi drug resistant (TB)/Extensively drug resistant (TB)
NERCHA	National Emergency Response Council on HIV and AIDS
NGOs	Non-governmental organisations
OIs	Opportunistic infections
OVCs	Orphans and vulnerable children
OPD	Out patients' Department
PLWHA	People living with HIV and AIDS
PMTCT	Prevention of mother to child transmission
RC	Regional Coordinator
SNAP	Swaziland National AIDS Programme
STIs	Sexually transmitted infections
TASC	The AIDS Information and Support Centre
TB	Tuberculosis
UNAIDS	Joint United Nations Programme on HIV and AIDS
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
URC	University Research Corporation
VCT	Voluntary counselling and testing
WHO	World Health Organisation

1. Introduction

This is a training placement like no other. While there are immense challenges and frustrations, there is an opportunity to make a difference for some of the most neglected and sick people on earth.

Public Health projects take time to implement and sustain. The ongoing leadership and support of John Wright (who first went to Siteki in 1993) and Leeds/Nuffield (since 1999), through a variety of public health specialists, means that any individual placement is one piece in this ongoing jigsaw to improve the health of people in Lubombo.

The road is long

In the late 90s I spent two years working as a clinician in sub Saharan Africa -three people to a bed, the AIDS pandemic overwhelming, stigma extreme, knowledge minimal and rumour great. Most people still had no clean water, and people died of malnutrition. This ignited my passion for Public Health – we patched people up, only for them to return. Clean water, food security, health protection and promotion was lacking – public health was needed to complement the clinical work.

Eight years later, I returned to sub-Saharan Africa having completed GP training, spent more time abroad and in my final year of Public Health training. Having run the TB programme in my previous placement, the suggested priority of working on TB/HIV integration as a Senior Research Officer seemed ideal.

I held a training placement at Good Shepherd Hospital, Siteki, Swaziland from September 2007 – September 2008. Both Iain MacLennan¹ and Ciaran Humphreys have written excellent reports about this placement. I would refer anybody with interest in this attachment to these reports² and in the interests of brevity will not repeat the details on background, culture and context of Swaziland and Lubombo, merely slightly update some figures. Four years on from Iain’s experience the situation seems to remain very much the same – rising HIV and TB cases (highest rates in the world, lowest life expectancy), high turnover of staff, food insecurity and a complex HIV architecture of NGOs and FBOs (Faith Based Organizations).

However, taking the long view, over the 5 years since these training placements have begun, there have been terrific improvements for people living in Lubombo - thousands of people are on treatment, and most now receive it in the clinics close to their home. They receive food aid, TB treatment and are regularly screened for TB. Many are members of HIV support groups and those who aren’t often say they don’t need to be as the stigma is minimal, people talk openly. Also the national TB team has taken on the GSH model of adherence officers.

Next Page – Article in ‘PH.com’ (Sep 2008)³ summarising the placement

Training placement in Swaziland

Swaziland, a previously prosperous African nation, has experienced a life expectancy drop from 65 years (1993) to the lowest in the world at 32 years. The rates of both HIV and TB are the highest in the world and the economy is at a standstill. Three out of four people face starvation, as recent crops have failed, and most have no clean water as years of drought have dropped the water table below the pumps.

Unfortunately there is no public health infrastructure. However, the eastern mountainous region was lucky enough to have John and Helen Wright work at the Good Shepherd Hospital. This was the beginning of a UK link that has developed and led to several long-standing training placements resulting in well-grounded programmes with continuous evaluation.

In September 2008 I arrived in Swaziland for my final-year training placement. Primarily a research post in TB and HIV, writing research proposals, implementing trials, carrying out operational research, analysing results and doing conference presentations were all part of the core work.

I utilised every aspect of my training and experience: I wrote national strategies, did television interviews, taught, chaired national meetings, travelled to isolated homesteads to contact trace for multidrug-resistant (MDR) and extensively drug-resistant (XDR) TB patients, arranged isolation accommodation (even if this meant personally putting up tents), project-managed a build, and met with the minister of health and a prince.

Challenges were many and seemingly infinite: a national lack of beds for infectious and sick MDR and XDR TB patients, frequent stock outs of essential HIV, TB and epilepsy drugs, the whole country running out of HIV tests and even, food aid. Some local issues were predictable – like power cuts, staff absences, no water, no space, vehicle problems – but every day seemed to throw up more surprises.

Although there was no official on call – the reality is that you are on call constantly. Staff are called late at night or very early mornings, bank holidays and weekends included. I was in theory on a flexible contract and therefore working 0.8 of the time. It didn't happen!



A special tent is set up so that this young XDR TB patient, no longer needs to share a room with his grandmother and five other family members.

What I gained from this training placement?

It has been a unique opportunity to develop competencies, flexibility and leadership. The lessons learnt are generic: managing people, budgets, unpredictable complications and seemingly endless challenges.



But there are additional gains. My work as a clinician in Africa awakened my interest in public health. Having returned to the UK and trained further in public health, I had longed to return to impact on the immense needs. To have had the chance to do this and achieve some personal fulfillment is wonderful. But also wonderful is to know that the work has been effective – through constant evaluation of the programmes, and from personal feedback – and that people in Swaziland have benefited from this training placement.

I hope this training placement continues for others and similar ones are set up because the potential benefit both to the individual trainee and the population they serve is immense.

Kerry Bailey, SpR, National Public Health Service Wales



A TB nurse asks for directions.

Wales for Africa Health Links Group

The group was formally established in September 2007 in order to capture the enthusiasm and experience in international health links in Wales.

The group aims to facilitate a co-ordinated and effective approach to promoting and supporting the development of health links in Wales, through advocacy in strategy development, dissemination of and support for best practice. The group is supported by the Wales Centre for Health and National Public Health Service who provide specific specialist public health input.

For further information, visit www.globalhealth.wales.nhs.uk

2. Background

2.1 Country

	Swaziland	UK
Life expectancy	33.7 yrs (lowest in the world)	78.7 yrs
TB (STOP TB, WHO 2008)	1262 per 100,000 (highest in world)	15.5 per 100,000
Rate of HIV, % 15 - 49 yr olds UNAIDS 2008	26.3%	0.2%
Infant mortality (per 1000 live births)	112	4.93
Maternal mortality (per 100,000 live births)	390	8
Estimated number of deaths from HIV 2007	10,000	<500
Approx Number of PLWHA	200,000	77,000

Table 1 - comparison of some UK and Swaziland Health indicators (from WHO⁴, UNICEF and UNAIDS⁵)

The country continued to decline both economically and in health in 2007-2008. Although still classified as middle income country – and this has repercussions for funding from major donors such as Global Fund (GF) and Department of International Development (DFID)- the disparities remain large. If measured by the number of people in absolute poverty the country is one of the 10 poorest in the world. UNDP(2007).⁶

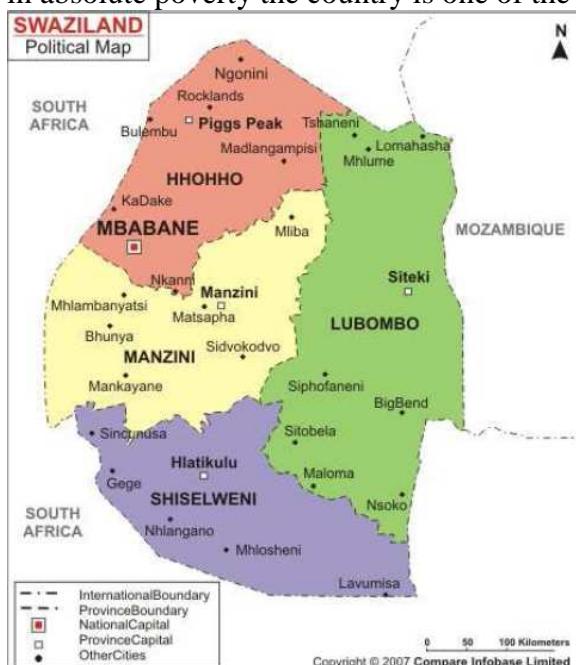


Figure 1 Political map of Swaziland showing 4 regions and major settlements

Economic Indicators (see figure 2 for other indicators)

- 69% live below the poverty line (76% rural 50% urban)
- 78% < \$2 a day
- 48% < \$1 a day
- 40% dependent on food aid (UNDP 2007⁶)

	Probability of not surviving to age 40 (% of cohort), 2004	Adult illiteracy (% aged 15+), 2004	People not using better water sources (%), 2004	Underweight children under age five (%)		Human Poverty Index
	P ₁	P ₂	P ₃₁	P ₃₂	P ₃	HPI-1
Swaziland	74,3	20,4	64	9,6	36,8	53,9
Hhohho	70,1	17,0	47	8,0	27,5	49,8
Manzini	69,5	19,3	49	8,4	28,7	49,6
Shiselweni	78,5	20,8	65	9,1	37,1	56,6
Lubombo	81,9	26,3	81	11,0	46,0	60,5

Figure 2 - selected indicators from UNDP report 2008 comparing Lubombo to the rest of Swaziland⁶

2.2 Health

- Lowest life expectancy in the world – 33.7 years(WHO 2007⁴)
- Highest rate of TB in the world – **1262/100,000** (WHO TB report,2008⁷)
- Highest rate of HIV in the world-26% (15-49 year olds, DHS 2007⁹)
- 79.8% of TB patient infected with HIV nationally (WHO 2007⁴)

The rate of HIV continues to rise and Swaziland was still the country with the highest rate in the world (WHO, 2008⁸; DHS⁹, age group breakdown figure 3.). In females in their 20s, one in two are infected, which explains the higher antenatal figures, although there was a drop in the antenatal rate 2006-2008. Only one in five people survive to 40. The TB rate was not ‘one of the highest in the world’ as many official documents say – but the THE highest and by quite a long way (figure 5.).The reasons for this became apparent as the year progressed.

HIV Prevalence among Population Age 2 and Older by Age and Sex

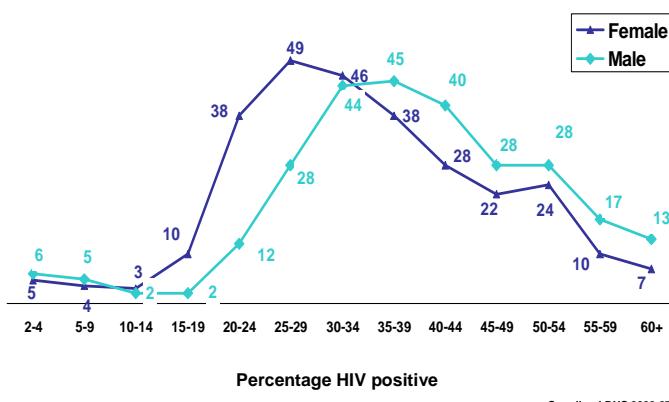


Figure 3 - Percentage of people HIV positive by age group in house to house survey (DHS, 2007⁹)

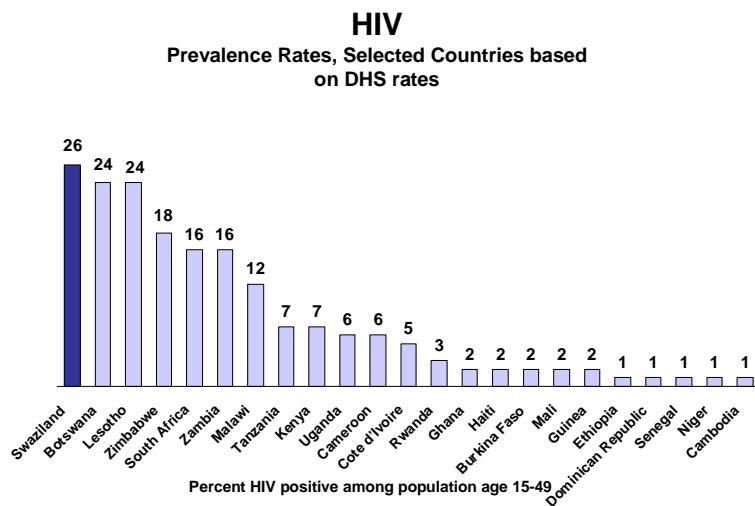


Figure 4 - HIV Prevalence by country, same method

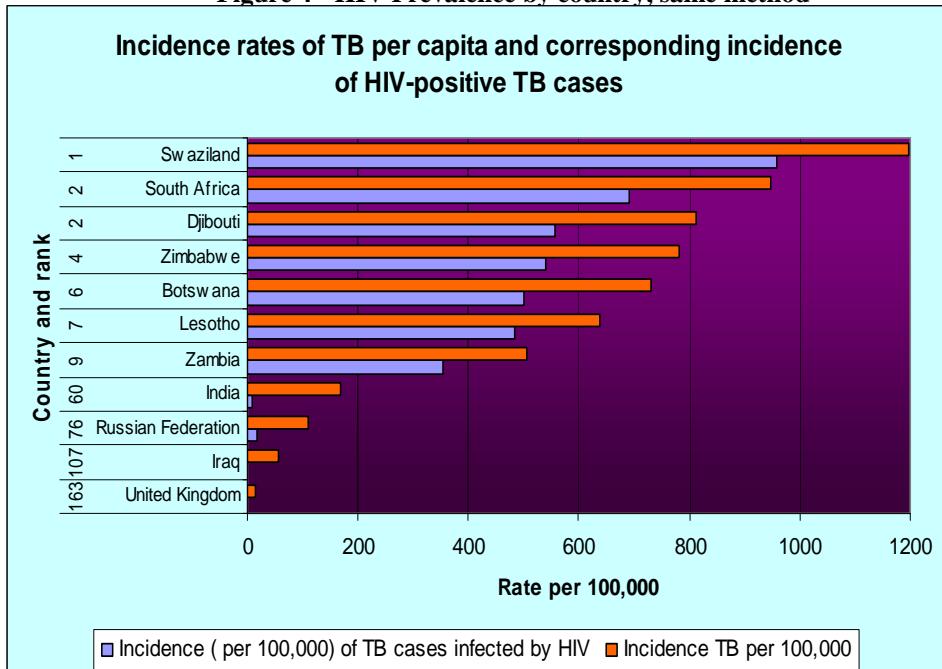


Figure 5 - incidence in TB in selected countries (WHO, Global TB control⁴)

2.3 Hospital and roles

There had been many changes in the 9 months before I arrived. The Senior Medical Officer/superintendent who had overseen the programmes and provided the training supervision had left in January 2007 and Ciaran Humphries had taken over the programme management. When the superintendent left, general programme management was handed over to Canaan Mamvura, as the ART doctor and personnel issues to Futhi, as the VCT sister. It took some months to define roles and responsibilities. The communication between members of the team was sometimes lacking and this led to sudden and unexplained changes which impacted heavily on the programmes.

In addition, the role of administrator and superintendent were still being defined and this led again to some confusion and clashes in some aspects of hospital management.

My primary task was the practical implementation of the TB/HIV agenda and research and analysis. As the programme management had been handed over I believed this would free me up to concentrate on this. However the clinical workload of Dr Mamvura and the colossal, unpredictable challenges meant that inevitably I was involved in the day to day running of many aspects of all of the programmes.

Main roles and responsibilities

1. Integration of TB HIV – hospitals, implementation and analysis
2. Integration of TB HIV - clinics
3. Introduction of HTC clinics, hospital;
4. Quarterly reports to COMDIS, EJAF, Claypotts
5. Supervision of BSc and MSc students
6. Developing and delivering education nurses, medical students. Lay people etc
7. Coordination and communication with National TB Control Programme,(NTCP), Swaziland National Aids Programme, community partners, regional health coordinators
8. Writing Proposals (COMDIS, Claypotts, Global Fund)
9. Peer reviewer for COMDIS
10. Coordination and reporting to various NGOs
11. Evaluation of data from all the programmes - TB/HIV, TB. ART, Motorcycle Adherence officers, Epilepsy, VCT/HCT
12. Clinical responsibilities in the rural clinics – ART clinics primarily.
13. Supervision of building work – TB HIV renovations (this included getting quotes when the hospital hadn't got any after 2 months and being consulted about almost every little detail)
13. Giving the Prince a guided tour of hospital! (see picture above)



However, areas such as the overseeing, payment and supervision of the Basiti - which had been clearly passed to somebody else - kept rebounding to me for several months.

It also quickly becomes clear that some people prefer to ask you to ask the administrator to send a workman to mend the door/drawer/computer... whatever... than ask themselves. I spent a long time enabling either through encouragement or 'up skilling.' However despite my best efforts there still remained a widespread, though not universal, lack of confidence in carrying out certain tasks.

3. HIV

3.1 Testing

Testing occurred in VCT and occasionally on the wards by the home based care programme. The WHO HIV testing and counselling (HTC) paper (2008) recommended that in high incidence populations (>1%) testing should be normalized and done in a similar manner as haemaglobin may be tested for. This means that people attending a health care facility should be offered tests – even if they had attended for a broken leg or diabetes - as an opportunity to identify people earlier and initiate treatment earlier. We set up a steering group to develop an implementation plan for HTC and having identified funding gaps I wrote a proposal and identified a funder, and implemented the programme. The community programme (allowing

patients to be tested at rural clinics by lay people and have CD4s done there, the samples and results travelling rather than the patients) was successful. The clinic nurses recognized this as a need and were pleased it did not result in an increase in workload for them. The hospital pilot went well but there were many challenges in rolling out to the rest of the hospital. This was mainly due to the rapid turnover of staff in July 08 where 30% of the nursing staff left – soon after we had trained 80% in HTC. This was due to ongoing conflict with the management regarding the package (pay, training etc) of employment and the availability of government jobs.

3.2 Treatment

The treatment programme had gained strength under the excellent management of Drs Humphreys, Mamvura and Sister Sweetness. Over 5000 people were on treatment and many in the community at their local clinic by mid 2008. This was clearly the strongest part of the programme when I arrived and, although doing clinical sessions in ART in the rural clinics, I was aware that there were many aspects of quality that could be improved I did not prioritize routine ART. The integration of TB into the HIV care (the three **Is** – Increased case finding(TB screening), Infection control (new building) and Isoniazid prophylaxis was prioritized however and the proposal written and pilot started.

3.3 Building work.

A new integrated TB HIV unit had been planned and I had expected this to be completed before I arrived – but it hadn't even started... I found myself taking the lead in getting quotes and supervising and coordinating the building work which was time consuming and, bar aspects of infection control and keeping to budget, I felt totally unprepared for. However ultimately it was satisfying to see a functioning unit, fit for purpose and liked by staff and patients (see photos p.12)

3.4 Care and support.

The Home Based Care programme took on many aspects of the social support and was well supported, well staffed and receiving funding from several sources. We had some discussions about the objective rationalization of care. The programme had been set up before ART was available but patients were never discharged. Some patients, previously bed bound, were now well, but still receiving the intensive package. We discussed developing a discharge programme to include income generation but this was never instituted. Resources were limited and difficult decisions had to be made but some members of the team preferred not to have an objective clinical criteria for receiving the intensive package of care. All patients with TB or on ART were eligible for food aid in the form of fortified mealie meal – although many patients complained about it. As the store room at the hospital was becoming overwhelmed as numbers increased so we arranged for the food aid to be sent directly to clinics for the named patients in ART, TB or PMTCT programmes. However, a famine in Ethiopia meant the food aid was re-assigned there and for 6 weeks there was no food aid in the country despite yet another drought and famine in Swaziland.

3.5 Basiti

This community support programme was working well with a network of community support groups and personal counseling available. Ciaran had managed to extend the funding for another year and the hospital and said they would pick up the funding after this. However closer to the time they rescinded this offer and I sent out several applications to funders to continue their funding. Funding applications were successful although I later heard the funding of the programme had been stopped after I left, perhaps due to misunderstandings. The

monthly training programme was usually coordinated by the HIV nursing staff but sometimes the responsibility for room, lunch, wages organisation would suddenly fall to me.

3.6 Data Analysis

Quantitative and qualitative analysis was a major part of the job. The Data clerks in the ART unit were able to enter data and produce routine data but not in depth analysis. Initially there was a data clerk in VCT but once the HAPAC funding ended the role went and appointing and training suitable people in all of the other programmes – HTC, TB, epilepsy proved impossible. All data analysis and interpretation, bar basic routine data was incumbent on me. I was also part of a team who carried out qualitative research on medicine errors in ART. I also carried out qualitative research in HTC, TBHIV and MDR TB.

4. Tuberculosis - TB

The HIV epidemic has fuelled the TB epidemic but the dual epidemic is particularly bad in Swaziland due to the slow and inadequate response. Until 2006 there was one person in charge of all clinical aspects of the TB programme and there had been no increase in capacity—despite the 10 fold increase in TB in the previous 10 years. In 2006 a programme manager was put in place and capacity was continuing to expand especially with the support of URC (University Research Corporation) in 2007-8. However, although the number of people was improving many were having to up-skill on the job and there was nobody with Public Health training or experience in the National TB Control Programme.

Incidence rates of TB in Swaziland and UK 1991-2006

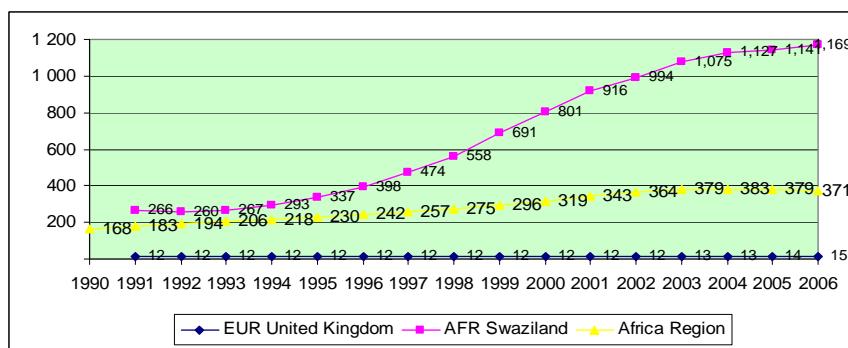


Figure 6-Change in Incidence rates 1990-2006 UK, Africa and Swaziland⁴

The first stage of integrating TB and HIV programmes is to check on the robustness of the individual programmes – simply integrating two weak programmes does not save lives.

A brief evaluation of the TB program in the first month showed that the GSH TB department was at that time prescribing TB treatment but were not way providing a programme.

This was mainly due to the fact that the nurse that had run the program for some time had been sent to another department resulting in new senior staff in the TB department – but none with any TB training.

Some of the deficiencies of the TB programme in September 2007

- no intensified case finding (by screening staff, HIV positive etc)
- low rate of diagnosed pulmonary TB cases with a sputum done at any stage
- very low return rate of sputum bottles being given out
- no spots being done – so the rate of return of bottles given out was very low
- bottles could only be given at GSH meaning that the patient had to make several very costly visits on order to deliver sputums and get results
- nobody was going to the lab to check on sputum positive results and see how many had turned up for treatment
- nobody was tracking down sputum positive patients who did not come back for treatment
- no TB suspect register, and when one did arrive not filled or used properly
- although it was policy to have treatment supporters on talking to patients most did not actually know it was, bring the treatment supporter with them and many did not live close by.
- transfer out papers had stopped being used and anyone who was diagnosed with TB from another area was merely sent away with CXR and told to go elsewhere. Even some sputum positive , and there for infectious MDR (multidrug resistant) patients were sent away in this method – no effort was made to contact other diagnostic centre and give details so could be traced if defaulted.

As there was nobody in the TB department who had training in TB control programmatic management it was a continuous challenge to reintroduce the necessary parts. This would normally have been monitored and supervised by the regional coordinator (one RC for each region). However the Lubombo RC was away for the whole of the year I was there so there was no effective supervision (this had been recognized as a weakness by the WHO in the technical visit in 2007).

The key for the GSH team, having been trained, was for them to keep all the balls in the air (for example not drop regular lab visits when they introduced spots or HIV testing etc).

Fortnightly data meetings to discuss routine data were set up. There was a tendency to present the data they collected in isolation – not reflecting on why it was being collected, what it meant, how it related to previous data, what it should be. This existed in all departments.

4.1 MDR TB

When I arrived in the country there were no sputum cultures happening anywhere in the country – although there had been a survey June –August 07. The national laboratory received accreditation soon after. Through negotiation they agreed to do some cultures for us on selected patients. But it took some weeks to negotiate with the hospital and other partners to get twice-weekly transport of sputums for cultures.

Despite constant requests from clinicians including myself for the results of survey – done June – Aug 07 we had nothing by April 08. I managed to persuade lab to let me have results on a named patient basis on clinical grounds – and so we started to uncover the true extent of MDR and XDR which until that stage the country had denied existed in Swaziland. For one

XDR patient the results could have been given to us 6 months earlier. During this time she had spent 2 hours walking each way to her nearest clinic, slept in a small hut with 5 other people, mixed with health care staff daily and gradually become weaker and more unwell. One of the MDR cases, with whom there had also been a several month delay, was a school teacher – again putting the vulnerable at prolonged risk. There were no isolation beds in the country. I spent many months negotiating a plan for suitable isolation for these patients, working in partnership with the key stakeholders, doing options analysis, presenting to the ministry etc (the response was always that the new TB hospital was about to open – but it didn't in the year I was there). Even when it did, late 2009, there would never be enough beds for all those infected. In desperation, we started doing home visits to carry out infection control assessments, education (using a model used in Peru and Lesotho) and put up tents for those patients where there was no alternative. It was far from ideal but there was no other choice available in the short term. 18 months later this short term stop gap is still the best (only) available option – Shelterbox tents.

Presenting in front of the press, Minister for health, WHO etc on the world TB day the fact we had a XDR case at least resulted in a bed for her being made available (where there had been none in the country) but didn't solve the national crisis. The hospital eventually opened late 2008. TB still hasn't been declared an emergency and there is no apparent political commitment.



Figure 7 - Shelter box tent for one sputum positive MDR patient who was previously sharing with 5 others

5. TB HIV

This was the main focus of my work. The hospital proposal was written by Ciaran (April 2007) and this was what I concentrated 2007-2008 on as laid out by Ciaran

- coordinating the renovations and building work to have a TB HIV integrated building recognizing Infection Control guidelines
- implementing and evaluating TB screening into OPD, ART, PMTCT
- implementing HIV testing into TB unit
- ensuring that all aspects of TB and HIV were integrated by all staff in the programmes.
- writing COMDIS proposal for 2008-2009 – TB HIV integration in the clinics – including the 3 Is; Starting the pilot in one clinic, consulting other clinics for further implementation and evaluation.



Above left- Old waiting room for ART patients - crowded and infection control risk (especially for TB). Above centre and right - New ART waiting room

There was a great deal of analysis and evaluation of the data from this project. Often with incomplete data. I was able to demonstrate however that the screening for TB using a symptomatic questionnaire in ART was more effective than the use in OPD and therefore limited resources were more appropriately spent in ART rather than OPD at this time.

6. Adherence – Motorcycle Adherence Officers

When a treatment supporter, local clinic, community health worker or the diagnostic centre have concerns with a patient missing treatment they inform the diagnostic centre or the motorcycle adherence officer (MAO) directly. (In reality nearly all the information came from the missing of appointments in the diagnostic centre). This applies for ART, TB, PMTCT and epilepsy. The motorcycle adherence officer then goes to the homestead and keeping patient confidentiality tries to identify where the patient was and the reasons for defaulting or treatment interruption.

Early in 2007 the national TB programme in Swaziland were keen to recruit motorcycle adherence officers across the country and included in the Global Fund bid for round 8 a motorcycle officer for each diagnostic centre. However, there had been no formal analysis of the motorcycle adherence programme.

Data had been analysed especially for ART on the reasons for defaulting but no comparative analysis had been done on the outcomes.

A first analysis of comparing final outcomes of those who lived within the intervention area compared with a natural control group - those that lived outside the intervention area- looked persuasive (below). However, it was likely to be biased as those who hadn't been visited lived further away and there were other factors (cost of transport) why they may not have returned for final evaluation at end of treatment.

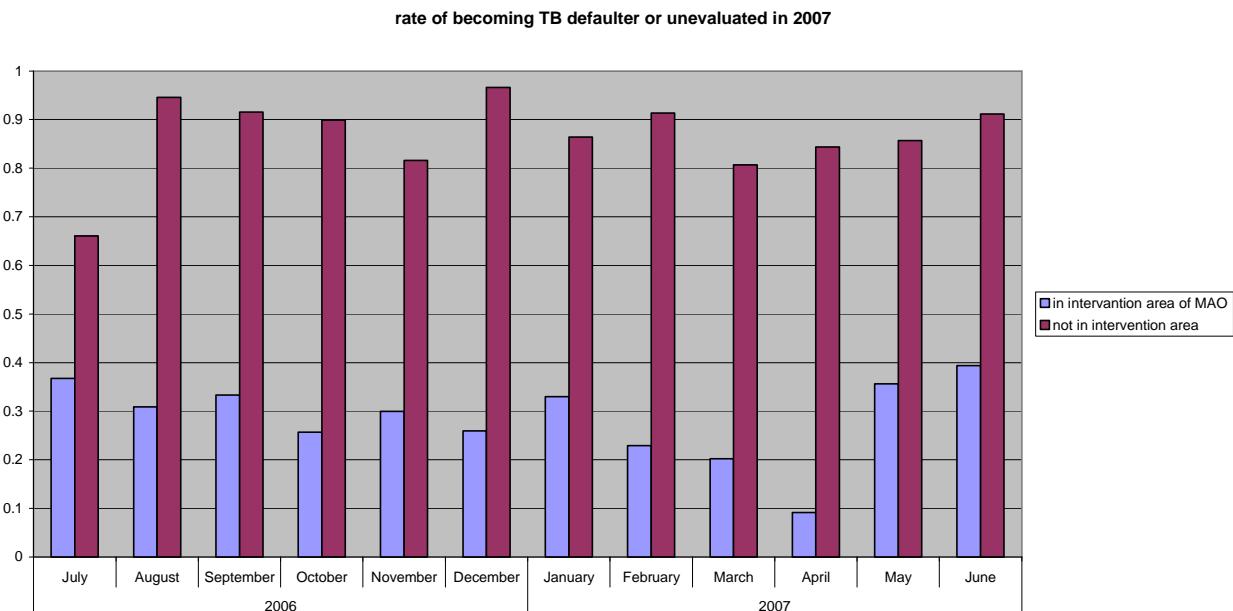


Figure 8- comparison of becoming defaulter in intervention zone (blue) and outside intervention zone (purple)

Final analysis selected patients who lived within the 50km intervention zone *and* were known to have interrupted treatment by 5 months. They were therefore all eligible to have received a visit from a motorcycle officer. The controls were those who had not despite being eligible. This seemed to be due to human/systems error and effectively by chance.

There were no favourable outcomes in the group who did not receive a visit. Of those that did receive a visit some were counseled and enabled to come back to complete treatment. A visit from the MAO is significantly more likely to result in a favourable outcome(cure, completion) Odds Ratio of a good outcome- 10.19 (95% CI 3.31- 31.33).

This demonstrated that a visit from an adherence officer is likely to improve outcomes and therefore a worthwhile program to continue to support and roll out to other areas.

		visited by MAO		Total
		no	yes	
outcome	completed	0	18	18
	cured	0	2	2
	defaulted	24	43	67
	died	2	36	38
	failure	1	0	1
	transferred out	1	17	18
Total		28	116	144

7. Epilepsy

I sought to negotiate reasonable solution for the Epilepsy nurse so he did not have to cancel clinics when suddenly called to do night duty. I compiled some data for the annual report. In April 2008, Dr Helen Wright who had set up this community programme was able to join me.

8. Supervision of Students

I supervised the projects of 4 Medical students, 3 doing intercalated BScs in International Health and an MSc student. There were also medical students on elective, a Speech Therapy student and volunteers who needed guidance and supervision.

9. Some main achievements

Local

1. Supervising the renovation building work of the new TB HIV unit to completion
2. Developing a local MDR community programme and implementing, including securing isolation tents
3. Through consultation with all stakeholders developing agreed vision of where both TB and HIV services and the integration should go in Lubombo
4. Identifying and securing funding for a HIV testing and counselling programme. Using a transparent and objective recruitment process to appoint staff to this programme.
5. Implementing TBHIV at GSH and Cabrini and implemented the '3 'I's for PLWHA (Increased case finding of TB, Infection control and Isoniazid preventative therapy). By demonstrating the feasibility and effectiveness in this resource limited setting it has enabled the national programme to follow suit.
6. Having recognized that the centralization of tests and giving out of results was too expensive for most patients - developing transport services to all rural clinics in Lubombo from zero to once a month and then to three times a month and a plan to move to weekly for samples – so samples move not patients
7. Managing accounts for projects from various sources

National

8. Coordinating and writing successful National Green Light committee application
9. Part of the small writing team of the successful TB Global Fund round 8 bid
10. Raising the awareness of TB by television and other advocacy opportunities
11. Two oral presentations at the South African TB conference ICC Durban June 08 and several posters at different conferences

Please see Appendix 1 for the list of competencies I achieved.

10. Practicalities

Preparation

My family and I visited Good Shepherd Hospital in April 2007 to judge whether this would be a suitable attachment for myself and acceptable to the family (we funded this trip ourselves). At the hospital, there were frequent power cuts and sometimes days without water. Taking a family is different to going alone. We decided that for our family alternative accommodation a mile away, where there are constant basic amenities, was more suitable.

I didn't do HIV and TB clinical sessions in the UK before I left as I felt that my previous experience gave me some grounding in these areas. However, I did several online CPD training sessions to update my knowledge and attended several training sessions whilst out

there. I would recommend anybody to attempt at least a few clinical sessions in these areas if they are not familiar with these topics.

Technology

My husband and I took 3 laptops with us (personal and training scheme). We paid for phone line, all calls, internet connections, anti virus software etc. These cost us over £200 a month – there is a monopoly in Swaziland and costs remain high. We bought local mobile phones and paid for all our own calls. These were more expensive than the UK and as most people do not have money they will ‘buzz’ you meaning that all the costs fall to you. I often spent £50 on mobile phone calls per month for work.

11. Conclusion

This placement provided opportunities to develop many competencies; work under stressful conditions; prioritise when there are so many pressing needs and perform with a limited team.

This is a research post. But this report demonstrates how much broader the post is. However a large time was spent analysing and reporting data either informally to colleagues and staff, regionally or nationally. Despite the large amount of analysis of all the programmes the data was often disappointingly poor and of insufficient quality to be used other than an indicator internally. In addition, there were so many other pulls on ones time that getting that data up to ‘publishable’ standard was extremely difficult whilst there.

As a training placement, there are many possibilities and potential benefits. It remains the only international Public Health training placement in a developing country. It is an opportunity for those people wanting to pursue a career in international health to gain some ‘field experience’. But it is also an opportunity for anyone committed to reducing health inequalities to do so and address the needs of a population with some of the worst health outcomes on earth.



Above - King Mswati III at the Reed Dance Sep 2009

Appendix - Competencies Demonstrated in HIV-TB, Senior Research Officer post in Swaziland

1. Surveillance and assessment of the population's health and well-being (including managing, analysing and interpreting information, knowledge and statistics)

1.2, 1.4, 1.8, 1.10, 1.12

2 Promoting and protecting the population's health and well-being

2.5, 2.6, 2.8, 2.10, 2.15

3. Developing quality and risk management within an evaluative culture

3.5, 3.7, 3.9, 3.10, 3.12

4. Collaborative working for health

4.1, 4.2, 4.3, 4.5, 4.7, 4.8

Collaborative working for health was an area, which I hadn't expected to predominate in my work, but did. This included working with many people involved in the AIDS architecture of Swaziland including a wide range of NGOs and FBOs and indeed being chosen to be part of the national working group to help set up the national partnership group for TB with FBOs and NGOs. But also I was asked not only to join but chair the small working group on MDR TB whose members included the TB/HIV/CHD WHO Swaziland rep, the national program manager and lead clinician of the national TB control program and the MSF medical country coordinator.

5. Developing health programmes and services and reducing inequalities

5.1, 5.2, 5.4, 5.5, 5.7, 5.8, 5.9, 5.10, 5.11, 5.12, 5.13, 5.14

6. Policy and strategy development and implementation

6.1, 6.5, 6.7, 6.8

Again this was an area I hadn't predicted would be a large part but found myself utilizing every opportunity to talk to MPs, Ministers, princes, bishops about the issues of TB and HIV. I was shocked at the low level of knowledge and insight into TB that influential people had. I hosted the prince, his head master and some of his friends one evening for 2 hours at the hospital to help them to see and understand the very real issues facing his compatriots, which he seemed to be largely unaware. Used opportunities to present on the television – including a 45 minute interview on national breakfast television.

7. Working with and for communities

7.1, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8

Plenty of opportunity to utilize competence due to thorough UK training which is lacking in much of the world. Housing, water...although frustrating at how little one can do also opportunities to make a real difference and implement change. But most importantly

7.7 : 'Act as an advocate for the public health and articulate the needs of those with poor health in society, including those who are dispossessed, vulnerable and discriminated against.'

– these people seemed to have no advocates and so wherever and whenever possible I would act as an advocate, reminding leaders of their plight, writing proposals for money, implementing programs for their benefit, working proactively with the media, engaging key stakeholders.

8. Strategic leadership for health

8.1, 8.2, 8.3, 8.8, 8.9, 8.10, 8.11, 8.12, 8.13, 8.14, 8.15

Plenty of opportunity for demonstrating perseverance to sound PH advice, resilience, leadership.

Management, vision... Having identified needs, assessed the evidence I wrote strategies, proposals and implemented several new programmes including rural HIV testing and counseling, and MDR/XDR TB care and treatment

9. Research and development – What I expected the job to be!

9.5, 9.6, 9.7, 9.8, 9.9

10 Ethically managing self, people and resources

10.2, 10.3, 10.4, 10.5, 10.6, 10.7, 10.9, 10.10, 10.11, 10.12, 10.13, 10.15, 10.16,

Very pleased that I had been involved in recruitment process because this gave me the opportunity recruit ethically – from open adverts, quantified, consistent and open interviews with a board of interviewers and appointment on ability and competence – not on whether they were related to the king or administrator. Ethically managing others was surprisingly challenging when the professionals and colleagues do not have the same code of ethics!

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