Ulster Med J 2016;**85(2):**80-82

Medicine Outside the Comfort Zone

Improving Psychiatric Care in Rural Zanzibar

David Purdy

Accepted: 1st December 2015
Provenance: Internally peer-reviewed

'The next patient has not eaten or spoken in over a week'. I had been working as a volunteer doctor in rural Zanzibar for over three months but still hadn't got used to the early morning ward rounds in the blistering heat. There was the usual mix of pneumonia, malaria and malnutrition but straight away you could tell this patient was different.

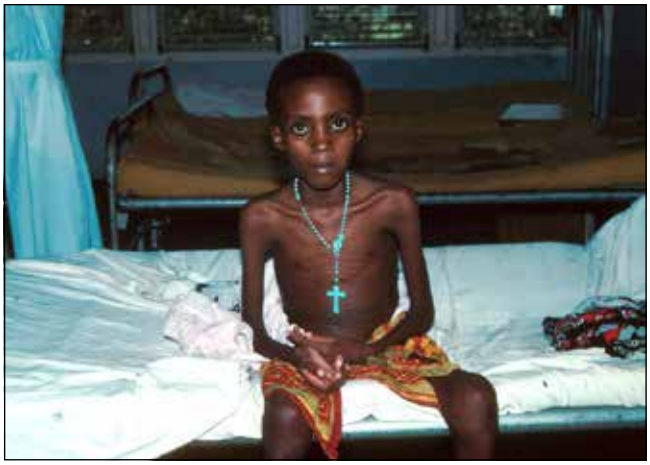

Fig 1. A local child with malnutrition in Makunduchi Hospital.

Despite its idyllic setting and thriving tourist industry, Zanzibar remains one of the world's poorest countries. Unsurprisingly, the public health system does not come close to meeting the countries needs with 1 in 12 children dying in infancy and a doctor:patient ratio of 1:20,000[1]. (figure 1)

In 2006 the UK based charity 'Health Improvement Project Zanzibar' (HIPZ) was established to try and combat this. An agreement was reached with the Ministry of Health that gave HIPZ direct control over the rural hospital at Makunduchi for 10 years. The model centres on sending volunteer doctors out for 6 month sabbaticals where they live and work alongside local staff, immerse themselves in the everyday workings of the hospital, identify weaknesses and try to improve things from the ground up.

In a few years Makunduchi has been transformed from a dilapidated building with no doctors or management into a fully staffed hospital with a new Primary Health Care Unit, Operating theatre and Maternity unit (figure 2). Local surgeons, anaesthetists and radiographers have been trained to care for the population and services like blood transfusion and ultrasound have been established. Most importantly, every change introduced is self-sustainable so that when the charity eventually withdraws things will not fall apart, a problem which has been seen time and again by NGOs in the developing world.

Fig 2. Twins born in the new maternity unit about to go home.

This model of an African government handing over control of a state hospital to a Western charity is the first of its kind. It has however proven to be very successful, so much so that in 2012 the President of Zanzibar requested that HIPZ repeat the process in the largest rural hospital on the island at Kivunge[2].

Knockbracken Hospital
Email: david_p88@hotmail.com
Correspondence to Dr David Purdy, CT 1 Psychiatry.

Mental health services have however typically lagged behind. Zanzibar has one Psychiatrist to manage a population of 1.25 million across 2 islands, with psychiatric care centralised to the former colonial asylum at Kidongo Chekundu in the Capital. It is a country where mental illness is poorly understood, stigmatised and feared[3].

Two years ago the charity set out to change this. In collaboration with Psychiatrists from Haukeland University Hospital Norway, a pilot scheme was established to improve Mental Health services in rural Zanzibar. It was noted that each hospital had a handful of 'Nurse Psychiatrists' working in general roles. These staff had already some basic Psychiatric training and many were interested in the opportunity to learn more. The ultimate goal, to operate as independent mental health professionals in the community.

Training was based on the WHO's *mhGAP Intervention Guide*, a hands-on approach for treating mental illness in resource poor countries. A new community clinic was also established in the HIPZ run hospital at Makunduchi to aid training and give structure to a previously chaotic system.

Lying on the bare mattress was a disheveled and malnourished woman in her forties, and at first glance she appeared to be in a coma. An elderly relative had set up camp on the floor beside the bed. The only thing I could ascertain in my broken Swahili that she had become progressively worse over the past few months. Observations were stable and physical examination was essentially normal, though she was completely unresponsive, even to pain. Her limbs moved easily when examined, though it was soon noted that after pressure was removed they remained in exactly the same position.

By the time I arrived in Zanzibar in October 2014, fresh out of FY2, the Nurse Psychiatrists had completed their training and had already begun to operate the clinic independently. It was largely agreed that things had been a success. However, on closer inspection a number of problems had arisen. There was no data to support any of the claims, we had no evidence that patients actually found the new system beneficial and, most importantly, the financial incentives and official recognition promised by the Government to the Nurses had never materialised, resulting in several dropping out of the programme.

It was clear that action was required to ensure the project's survival and sustainability.

First, I audited the clinic to see if the anecdotal evidence could be reproduced in figures. A sample of 100 patients was taken and several criteria measured, including diagnosis distribution, correct prescription and risk assessment. The results proved that the training had indeed been a success and that the Nurse Psychiatrists were operating at a high level. 100% of patients had an mhGAP recognised diagnosis, 93% were prescribed the correct medication and 94% had a Risk Assessment completed. However, the diagnosis distribution raised some concern. Two thirds of patients attending the clinic had a primary diagnosis of epilepsy (there is often little distinction between Neurology and Psychiatry in the Developing World) with proportionally very few attending with depression, anxiety, psychosis etc. This showed that the target population was still not being reached and highlighted the need for education and promotion of mental health in the community.

Next, I organised Zanzibar's first Patient Satisfaction Survey. 63 patients were interviewed as they attended the Psychiatric clinic, questions included their opinion on the service and what improvements they would like to see. Again the results were reassuring, 73% rated the clinic overall as 'Excellent' and 86% reported that they were always treated with respect and dignity. When asked for improvements popular responses included 'better drug availability', 'more clinics' and 'better education'. It also gave an interesting insight into local views on mental illness, with 30% reporting they felt stigmatised because of their condition.


o cha kuegesha gari

Dk. David Purdy kutoka HIPZ (kulia), akimkabidhi cheti muuguzi kutoka hospitali ya Cottege Makunduchi Pandu Kassim Khatib, baada ya kumaliza masomo ya mwaka mmoja katika fani ya uuguzi wa akili, hafla hiyo ilifanyika huko Cottege Makunduchi.(Picha na Ameir Khalid).

Fig 3. National Newspaper coverage of the Graduation Ceremony.

The patient was catatonic. We contacted the family and began to piece together a medical history. As a teenager she had begun to act strangely, withdrawing socially and reported hearing things that were not there. After years of attending local healers and witch doctors she eventually became unmanageable and was brought to Kidongo Chekundu where she was admitted and given medication. Her condition improved and for a long time she lived at home and worked in the village. However, government stock-outs of medication were common and her family could not afford the prices in the private pharmacies. Eventually she stopped taking medication altogether, she withdrew, stopped speaking and eventually stopped eating.

The most difficult part was of course using this information to make changes. The HIPZ model has always centred around sustainability, every improvement introduced must be able to stand independently when the charity eventually withdraws. However, in one of Africa's poorest countries getting financial backing from the government, particularly for mental health, is never easy.

Firstly, the hard work and achievement of the Nurse Psychiatrists had to be recognised. I designed and organised an exam and graduation ceremony in the hospital, ensuring it was attended by local government officials and the national press. The ceremony received a full page in the weekly newspaper (figure 3). I then organised a series of meetings with the Minister of Health. In them, all of the achievements of the new service were presented as well as the plans for the future and of course, the many potential opportunities for positive publicity to those who were attached to it. In the end, the Ministry agreed to provide both financial and political backing for the service as well as formally recognising the role of 'Psychiatric Nurse Specialist' for those who undertake the training. (figure 4)

I also used the new government support to introduce some immediate improvements to the service. Prior to my leaving, the number of clinics had doubled, an outreach service and education programme was introduced to local schools and primary health care centres and a fortnightly radio show was established.

I left Zanzibar in January 2015 but the new clinic has remained strong. The future is also hopeful, in September we made a successful pitch to Festival Medical Services and received a grant of over £12,000 specifically for Mental Health development. The main plan for 2016 is to replicate the model on a much larger scale on the North of the island. This will mean a further 190,000 people will have access to community psychiatric services.

As for the patient, we commenced her on Benzodiazepines and Haloperidol (atypical antipsychotics are still a long way off in Zanzibar) and within a couple of weeks she began to move, eat and eventually speak. She was discharged and given a follow up appointment at the new clinic. Unfortunately however she did not attend. Despite our progress, mental health continues to be treated with superstition and fear in Zanzibar. It is only by addressing this problem from every angle that we will be able to reach the most vulnerable.

Fig 4. Meeting at the Zanzabari Ministry of Health. 2nd from left - Dr. Mohammed Jiddawi (Permanent Secretary Health). Centre - Newly recognised Psychiatric Nurse Specialist, Pandu.

REFERENCES.

1. United Nations Development Programme. Human Development Initiative. *Tanzania human development report 2014. Economic transformation for human development.* Dar es Salaam, Tanzania: Economic and Social Research Foundation; 2015. Available at: http://hdr.undp.org/sites/default/files/thdr2014-main.pdf. Last accessed February 2016.

2. Chapman MS, Greville-Heygate F, Singer R, Rees J, MacDonagh R. Health Improvement Project Zanzibar: a new model of healthcare delivery. *Trends Urol Mens Health*. 2015; **6(5)**: 35-39.

3. Jenkins R, Mussa M, Haji SP, Haji MS, Salim A, Suleiman S. Developing and implementing mental health policy in Zanzibar, a low income country off the coast of East Africa. *Int J Ment Health Syst*. 2011; **5 6**:1-11.

