

The Bridge2Aid Dental Volunteer Programme



Volunteering on dental programmes abroad can not only be a valuable learning experience for the dentist volunteering, but can also provide the opportunity for them to help educate and train much-needed clinicians in the country they visit. One such programme is the Bridge2Aid Dental Volunteer Programme in Tanzania. Here Jennie Harvey describes the programme and what is involved.

The Bridge2Aid Dental Volunteer Programme (DVP) is a hands-on experience whereby British dentists and dental nurses deliver, and train others in delivering, emergency oral healthcare (EOHC).

DVP began in 2004 and was initially developed in partnership with Dentaaid. Since the inaugural DVP, Bridge2Aid (B2A) has run 11 more programmes, each one reaching and training more people than the last. In total, DVP participants have successfully trained over 50 rural clinical officers (RCOs), providing a long-term, sustainable solution to the problem of unskilled clinicians in remote areas of northern Tanzania.

Why is emergency oral healthcare (EOHC) such a necessity in Tanzania, and how does DVP help?

The main problem in Tanzania is the absolute lack of trained medical personnel who can provide EOHC to people living in rural areas. Because trained personnel simply are not available, patients have to resort to a next referral level or to attending unqualified 'tooth extractors'. In any case, associated costs are high and complications are likely and unavoidable. Not only is treatment at best delayed, often it is of a poor standard, resulting in infection, serious injury, large blood loss and/or septicaemia. And of course, lack of appropriate and essential equipment

coupled with poor practice is a serious obstacle in providing oral care.

Essentially, DVP provides a solution to the problem of unskilled dental personnel in rural Tanzania. Each DVP is a structured 13-day programme of delivering training to RCOs and carrying out basic dental services.

How does DVP equip RCOs?

RCOs undergo an intensive dental training course with three distinct phases. The first phase involves four days of training in basic dental anatomy and theory. The second phase follows immediately and involves six days of one-to-one tuition with a qualified dentist or experienced dental therapist or dental



Kiaran Weil teaching clinical officers injection technique

officer. The final phase involves follow-up by the District Dental Officer (DDO) to assess and improve on the skills gained in phase two and to monitor actual service delivery, quality of care, registration and referral practices.

How does B2A plan to enhance DVP?

Sustainability underpins the aim of DVP. With this in mind, we will be empowering RCOs that have successfully trained on a previous DVP to become trainers of others. This will be effective from late 2008, when we will be using RCOs on each site as trainers as an initial trial. This principle of trainees becoming trainers and the districts eventually having their own team of skilled practitioners who can operate in-house training, is fundamental to B2A's philosophy of operation.

What is the training content of the DVP?

Phase one is based at a district hospital. The theory course is a four day residential format. After an initial baseline assessment, RCOs are trained in initial welcome and assessment of patients, health and disease, healthy teeth, anatomy, external and intra-oral examination, tooth extraction, complications

of extractions and post-extraction care, local anaesthetic, care of instruments, and cross infection and safety, etc. Training is classroom-based.

Phase two is a six-day practical course based at two primary healthcare facilities (PHCFs) in the participating districts. The aim of the practical training is to gradually increase the level of exposure to performing extractions over the course, under the close supervision of a qualified practitioner (a volunteer UK dentist, the DDO or experienced and suitably approved dental personnel – eg a dental therapist or dental officer). In addition, trainees are developed in patient care, diagnosis, administration of local anaesthetic and care of instruments. For sufficient training to occur, a large number of patients are required to provide opportunities for the RCOs to gain experience. For this reason the training is based in PHCFs that can provide a suitable number of patients (between 80 and 120 per day). Subject to successful completion of a written test and practical assessment by the trainer, the RCO is awarded a certificate of competence in EOHC and allocated an instrument kit and non-electric steriliser for use in their base PHCF.

Finally, phase three involves a visit to the

RCO at one, two and six months by their DDO (subject to available resources we suggest that there is a monthly supervisory visit). Supervision provides support and gives an opportunity to advise, help, teach and motivate. The objective of supervision is to monitor and improve the quality of the services. The supervision focuses on clinical performance, presence of adequate supplies, condition of instruments and equipment, response of the community, number of patients attended, problems encountered during clinical procedures and record keeping.

How do you know DVP is effective?

To date, DVP has operated in two districts – Magu and Misungwi. Evidence from Magu District shows:

- The number of trained personnel has increased from two before intervention, to 40
- An increase in the quality of care available at a dispensary and health centre level – people no longer have to travel several miles for simple treatment
- Demand for emergency oral healthcare services in villages is high – the first year's statistics shows a fourfold

increase in the numbers of people treated thanks to the availability of services in the villages

- The training brings about a reduction in pressure on services at the district hospital – the first year after training started actually saw a reduction in the numbers treated at the district hospital, but a 50% increase in the number of advanced treatments provided.

How many RCOs have now been trained and equipped on the DVP?

Amazingly, we have now trained over 50 RCOs in EOHC. As the catchment area for each rural clinical officer is between 7,500 and 15,000 people, as a charity we have increased access to emergency dentistry for at least 375,000 people, and as many as 765,000!

So, what is it like to take part in a DVP?

Here, regular DVP participant Neil Marshall tells of his experience:

'The programme has developed a lot since the early days. Bridge2Aid has always been well organised but experience has shown areas where protocols are required. DVPers are given a lot more information about teaching objectives prior to their trip. WHO and FDI guidelines have been incorporated into the programme.

'As returning DVPers are familiar with the programme, they are more able to support first timers. Volunteers are now being given positions of responsibility within DVP which will allow increased sustainability, as the strength of the programme lies in the system rather than the personalities behind it. On my last trip the UK team was able to run the DVP independently, allowing the Bridge2Aid team to deal with other important issues such as meetings with government ministers in Dar es Salaam. Now the question of continuing professional development (CPD) for clinical officers who have completed training with DVP is being talked about. In four years the programme has transformed from an ambitious experiment to a professionally run project intent on sustainability and looking to expand into other areas of Africa where there is similar need.

'It is easy to explain DVP's success. The programme is well organised and is based on a model which provides a sustainable solution to a problem suffered by some of the poorest people in the world. A two-week period allows dental professionals to

take part while maintaining responsibilities at home.'

Neil recounts two of his most memorable experiences: 'There are many memorable experiences from DVP but perhaps two stick in my mind. On one of the first clinics of my first DVP, an orphan of about six years old was brought in suffering from toothache. She was HIV positive and I began to wonder just how unfair life can get. She had to have a tooth extracted.

'On my third visit a woman gave birth to a baby boy on the track outside the dispensary the team was working in. She appeared in the doorway clutching both baby and afterbirth. She was taken in and allowed to rest for two or three hours before going on her way, her baby strapped to her back. She named him Gabriel.

'I would say to the prospective DVPper: this is life at the coal face – go and experience it!'

Volunteers have a positive input in the development of the programme, another reason why so many dental professionals take part again and again.

I would like to volunteer – what skills will I need?

There are no set skills required for a DVP participant beyond two years' postgraduate experience. However, applicants should be up on their extraction technique and happy to carry out plenty of extractions each day!

A positive attitude combined with a sense of humour will definitely help get the most out of the experience. It is a difficult environment where everyone does the best they can with what is available; the RCOs are very willing to learn, a translator is provided, but you must be willing to demonstrate your skills and oversee the development of their technique.

How can dental professionals get involved?

The DVP programme is immensely popular with British dentists and dental nurses. Each trip is booked up months in advance and a waiting list is now in operation. The opportunity to volunteer overseas in a professional capacity has captured the hearts and minds of over 40 dentists and 30 dental nurses so far; many have returned once, twice or even more often!

As mentioned above, dentist applicants need at least two years' postgraduate experience. Dentists can apply by downloading an application form from our website: www.bridge2aid.org/cm/general/dvp

Qualified and experienced dental nurses and hygienists also play an important role on DVP, and are encouraged to apply. ■

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DOI: 10.1038/sj.bdj.2008.739



Phil Loughnane, a DVP volunteer, highlighting a problem to a clinical officer