


Civil–military cooperation on operational deployment: the Bentiu State Hospital medical training programme

Jeyasankar Jeyanathan,^{1,2} J E Smith ,^{3,4} E Sellon⁵

ABSTRACT

The United Nations Mission in South Sudan has a mandate to protect civilians and support the delivery of humanitarian assistance. Recognising this during Operation TRENTON, UK staff of the UN level 2 hospital were able to support the people of Bentiu through initiatives to develop local health services with on-the-ground civil–military cooperation. The Bentiu State Hospital Medical Training Programme was developed to train and mentor staff associated with healthcare in Bentiu, to help improve service delivery, support local health services with on-the-ground non-governmental organisation/military coordination and to create a platform to facilitate the sharing of information to support local health services with the overall humanitarian response. It was recognised how important it was to deliver a programme that carefully understood the unique challenging limitations, circumstances and environment. Hence careful tailoring of the programme was essential to ensure that the training was valuable, implementable and durable, long beyond the operational deployment of TRENTON. Despite the logistical and practical complexities, the programme was very positively received, and the training team believed that the development and progress made would build a small part of the future infrastructure of healthcare delivery in the region. Future contingency operations are likely to take place in the resource-limited austere environment. As reflected in this deployed initiative, local health training activity providing key knowledge to build resilience for the current and immediate future is a precious and important defence engagement utility.

INTRODUCTION

The United Nations Mission in South Sudan (UNMISS) has a mandate to

¹Academic Department of Military Anaesthesia and Critical Care, Institute of Research and Development, Birmingham Research Park, Birmingham, UK

²Department of Intensive Care Medicine and Department of Anaesthetics, St George's University Hospital London, London, UK

³Academic Department of Military Emergency Medicine, Royal Centre for Defence Medicine, Birmingham, UK

⁴Emergency Department, University Hospitals Plymouth NHS Trust, Plymouth, UK

⁵Academic Department of Military Surgery and Trauma, Royal Centre for Defence Medicine, Birmingham, UK

Correspondence to Jeyasankar Jeyanathan, Academic Department of Military Anaesthesia and Critical Care, Institute of Research and Development, Birmingham Research Park, Birmingham B15 2SQ, UK; jeyanathan@doctors.org.uk

Key messages

- ▶ Missions with the United Nations, in the resource-limited environment may offer the opportunity to provide healthcare training to help build into the local infrastructure.
- ▶ The Bentiu State Hospital Medical Training Programme was developed to train and mentor staff associated with healthcare in Bentiu, to help improve service delivery.
- ▶ Future contingency operations are likely to take place in the resource-limited austere environment as such tailored healthcare training programmes can be very valuable.
- ▶ Any healthcare training for the resource-limited environment should carefully factor the environmental and logistical challenges.

protect civilians and support the delivery of humanitarian assistance. This requires coordination between the United Nations (UN) and humanitarian community, in line with the UN humanitarian Civil–Military Coordination (CMCoord) policies and guidelines. CMCoord during operation TRENTON progressed from coexistence to cooperation with a shared strategy between the level 2 hospital and the humanitarian community of supporting clinical services at Bentiu State Hospital (BSH). This was built on a shared situational awareness and understanding of the importance of enabling the community to provide their own health security in an area outside the camp where they might want to return to.

The Head of UNMISS and Special Representative of the UN Secretary General expressed this by saying, ‘*We will work in full cooperation with our humanitarian partners to re-establish services in communities over time rather than continuing to use Protection of Civilians (POC) sites as convenient hubs for delivering aid or because of a lack of housing*’.¹ During Operation TRENTON, staff from the UK level 2 hospital were able to support

the people of Bentiu through initiatives to develop local health services with on-the-ground civil–military cooperation.

STRATEGIC BACKGROUND

UNMISS acknowledged several strategic challenges following the signing of a peace agreement in 2015. These included the perceived timidity of some troop contributing countries toward kinetic operations and the tendency to avoid movements outside the POC sites without requesting prior permission from parties to the conflict. These issues related to a reluctance to proactively project force and respond to the humanitarian crisis beyond the safety of the POC site, due to the perceived risk of action versus inaction, the level of available medical care and the availability of casualty evacuation. Steps taken to address these concerns have included large engineering projects, including the building of the level 2 hospital near the Bentiu POC site and a new airstrip nearby in Rubkona.

A related challenge faced by UNMISS has been the number of displaced people within the POC sites, which has grown well beyond even the worst-case scenario planning of 2015. In Bentiu for example, planning in 2015 was for a maximum of 75 000 people. In 2017 it stood at 110 000 people. The reasons, according to the humanitarian community, were local food and health insecurity as much as the requirement for physical protection. This further encouraged UNMISS to project its presence beyond the POC sites to stem the influx of new arrivals. With the uncomfortable prospect of future POC site closures and voluntary relocations, the emphasis shifted to a ‘Back to Bentiu’ strategy of community engagement to support communities and provide services in the areas outside the camps that people might want to return to.

It is with this strategy in mind, and with an understanding of the importance of building trust with local communities to fulfil the POC mandate, that staff from the level 2 hospital sought locally relevant ways to support the provision of healthcare security within Bentiu Town.

BENTIU STATE HOSPITAL

BSH was built by the Nile Pioneer oil company in 2005 to serve the vibrant hub of Bentiu and surrounding towns within Unity state. The hospital became of capital importance to over half a million people in the region. However, during the 2013–2015 war, the hospital became a target for violence.

The Medecins Sans Frontieres (MSF) Care under Fire project reported that 22 civilians were killed while seeking refuge in BSH in 2015. Destruction and looting of the hospital, patient fear of a criminalised healthcare system, fleeing of medical staff and intolerable conditions for those remaining led to complete deprivation of hospital services. This aggravated the harsh living conditions of the state, with near non-existent healthcare provision, protracted violence, displacement of people, a high disease burden, poor access to sanitation, illiteracy and high levels of poverty.

Healthcare provision was still endangered after the signing of the peace agreement in 2015, with Bentiu becoming a ghost town populated with government-loyal soldiers and few others providing essential services to its remaining residents.

In 2016, the Health Pooled Fund (HPF) and Cordaid International renovated, re-equipped and supported staffing at the hospital with 12 medical staff members: five doctors, two nurses, one midwife, two medical laboratory staff, one anaesthetic practitioner and one pharmacist. They also provided medical equipment, furniture and internet connectivity for the outpatient department. This helped to restore basic outpatient department services.

Through ongoing support from the HPF, supported by the British Government's Department for International Development, the US Agency for International Development and the governments of Canada, Sweden and the European Union, the hospital continues to provide outpatient department consultation, obstetric surgical services, blood transfusion, an expanded programme for immunisation, preventive and nutrition services, maternal and child healthcare services, tuberculosis treatment, prevention of mother-to-child transmission and HIV/AIDS services.

In 2017, despite famine being declared in parts of Unity state, UNICEF reported that residents had started to leave the UN POC site near Bentiu due to the lack of space and were starting to settle back in nearby Rubkona and Bentiu Town, taking shelter in disused government facilities and shops.² The dilapidated and bullet-marked BSH therefore became the natural focal point for our healthcare engagement activities.

BENTIU STATE HOSPITAL MEDICAL TRAINING PROGRAMME

The aims of this programme were to train and mentor at BSH to help boost staff capacity and improve service delivery, to support local health services with

on-the-ground non-governmental organisation (NGO)/military coordination and to create a platform to facilitate the sharing of information to support the health cluster and local health services with the overall humanitarian response.

We were mindful, as UN peacekeepers, of the need to be visible and transparent in our activities and operational principles. All stakeholders had to understand the principles of impartiality, neutrality and independence, so not to be confused with political actors, party to the conflict.

We also took care to demonstrate our commitment to building a long-term partnership with the local health administration. This partnership was fostered through weekly training sessions for the medical staff, following a programme that was designed by them. Aside from the delivery of clinical training, British personnel were also involved in repair and renovation works, as well as general cleaning of the hospital's wards and operating theatres.

It is well understood within the UK Defence Medical Services that there is a value in medical engagement with local services while on humanitarian operations. Supporting local health services with on-the-ground training and mentoring can be relatively easy to achieve and provides a mechanism for adding value when the operational tempo allows. The deployment of a role 2 medical treatment facility congregates clinicians with a very broad skill set, and there is usually enthusiasm among clinicians for such activity. In practice, however, operational, environmental, security and logistical restrictions can make this hard to achieve. Despite the mission analysis and identification of local engagement as an implied task, the complexity of the operation and related operational circumstances often dictate what can and cannot realistically, and more importantly, safely, be embarked on.

In addition, a key challenge to undertaking this type of activity is in the clear identification of actual training needs. This is far more complex than simply imposing UK medical standards and doctrine, and the temptation to lift a training package direct from one's own institution should be avoided. Careful tailoring of packages will ensure that training is valuable, implementable and durable, long beyond the operational deployment.

Factors that should be considered include local medical infrastructure (a partially functioning hospital with variable electricity, poor supply of clean water and limited access to sterilisation processes), equipment and drugs (limited, with unreliable replenishment lines, eg, oxygen cylinders

but no piped oxygen, unreliable cold chain for emergency drugs, poor standardisation of equipment, safety checks and procurement processes) and personnel (doctors, medical assistants, nurses, a midwife and a pharmacist, with variable levels of training and minimal postgraduation education or continued professional development).

Future contingency operations are likely to take place in the resource-limited austere environment (RLE). Any accompanying local health engagement training activity must reflect this. The training should aim to provide key knowledge and build local resilience for the current and immediate future. The aspiration to train personnel for the distant 'perfect' future is unrealistic, and in many ways unfair, particularly if there is no assurance that conditions will sufficiently improve. For example, teaching advanced diagnostic imaging skills or advanced anaesthetic skills without the required equipment in the RLE is unhelpful.

Military personnel who are involved in the design and leadership of training packages in the deployed RLE should have prior experience, understanding and exposure to working alongside aid agencies, charities, NGOs, the UN or WHO health clusters. These organisations have important roles in humanitarian operations, and therefore integrating into their locally applied medical training activities is important for synergistic benefit. This approach allowed this particular project to be delivered as a more efficient and effective package which contributed to a broader effort that was more likely to be successful.

In terms of delivery, the BSH Medical Training Programme was carefully designed and tailored for the healthcare providers of BSH and Rubkona. Personnel with previous experience and knowledge working closely with humanitarian organisations or through Defence Engagement collaborative training projects with organisations such as the International Committee of the Red Cross (ICRC) or other intergovernmental or NGOs were found to be of great value. Using this knowledge, associated training tools and doctrine, coupled with the training requests received from the BSH medical principals, a multifaceted training programme was proposed. Select personnel from the UK Role 1 and Level 2 hospital were brought together to draw on their specialty expertise and training abilities to deliver this tailored medical programme for the RLE in Bentiu.

Core lectures, with a multitude of simulation-based moulages as well as practical workshops formed the body of training for doctors, nurses, doctors and allied healthcare professionals, gathered not just

from BSH but also from the surrounding medical clinics in Rubkona. The main body of work was to introduce, rehearse and consolidate a structure for the management of medical, trauma and paediatric emergencies, within the limitations of the RLE and confines of the locally available equipment, drugs and personnel.

Doctors in BSH had specific one-to-one training in an apprenticeship type modal. For example, the local obstetrician had sessions with the UK radiologist to expand his knowledge and utilisation of prenatal ultrasound, sessions with the general surgeon to explore alternative surgical techniques and procedures and sessions with the intensivist to discuss anaesthesia and critical care techniques in the RLE.

The anaesthetic practitioner at BSH had personal training sessions as delivered by the UK intensivist, drawing on prior experiences training anaesthetic practitioners on the Geneva-based ICRC War Surgery Seminar Anaesthesia Workshop.

A modified six-part Primary Trauma Care course³ (designed to teach front-line health workers how to deliver emergency medical care with only basic equipment) was delivered, led by the UK orthopaedic surgeon.

This was then further developed as a separate trauma series of workshops and moulages led by two senior UK Critical Care Nurses and Intensivist. The team built in a structure of rapid assessment, resuscitation management, packaging, rapid transfer and handover to the secondary care hospital, which at the time was organised and run by MSF. The aspiration was that others should

continue to develop knowledge and skills, building the ability of BSH to develop its own autonomous, independent function once more.

CONCLUSION

Despite the logistical and practical complexities, the programme was very positively received, and the training team believed that the development and progress made would build a small part of the future infrastructure of healthcare delivery in the region. The relationships forged became very personal and important for the deployed UK clinicians, providing a deep level of professional satisfaction. More importantly, this CMCoord and cooperation actively embraced the UN Head of Field Office's 'Beyond Bentiu' strategy, looking to ensure that those who return home from the POC site are not disadvantaged from a healthcare perspective for doing so.⁴

Contributors JJ, JES and ES have been involved in the inception, writing and final editing processes of this article.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Not required.

Provenance and peer review Not commissioned; internally peer reviewed.



OPEN ACCESS

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>.

© Author(s) (or their employer(s)) 2021. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.



To cite Jeyanathan J, Smith JE, Sellon E. *BMJ Mil Health* 2021;**167**:353–355.

Received 3 August 2019

Accepted 6 August 2019

Published Online First 2 March 2020

BMJ Mil Health 2021;**167**:353–355.

doi:10.1136/jramc-2019-001302

ORCID iD

J E Smith <http://orcid.org/0000-0002-6143-0421>

REFERENCES

- 1 Peacekeepingun.org. United Nations Peacekeeping. Available: <https://peacekeeping.un.org/en/un-supports-efforts-to-return-displaced-people-back-to-their-homes-south-sudan> [Accessed 30 Jul 2019].
- 2 Gridneff I. Looted Bentiu Hospital continues offering hope for those who remain behind. Available: https://www.unicef.org/southsudan/stories_2017-looted-bentiu-hospital.html [Accessed 30 Jul 2019].
- 3 Primary Trauma Care. Available: www.primarytraumacare.org [Accessed 30 Jul 2019].
- 4 Unmissions.org. UNMISS - UN supports efforts to return displaced people back to their home in South Sudan. Available: <https://unmiss.unmissions.org/un-supports-efforts-return-displaced-people-back-their-homes-south-sudan> [Accessed 30 Jul 2019].